FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

INDO-PACIFIC FISHERIES COUNCIL

12th Session

Honolulu
Hawaii
U. S. A.

3-17 October 1966

IPFC Secretariat, FAO Regional Office for Asia & the Far East
Bangkok

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

CONSEIL INDO-PACIFIQUE
DES PECHES

CONSEJO DEL INDO-PACIFICO
PARA PESQUERIAS

I N D O - P A C I F I C F I S H E R I E S C O U N C I L

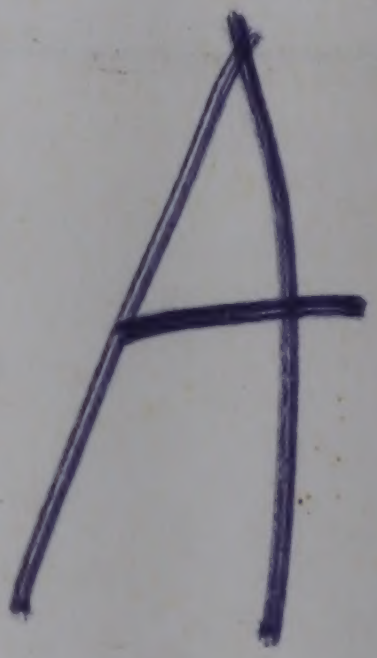
F.A.O. Regional Office for Asia and the Far East
Bangkok, Thailand

12th Session, Honolulu, Hawaii, U.S.A.
3rd - 17 October 1966

WITH THE COMPLIMENTS

OF THE

INDO-PACIFIC FISHERIES COUNCIL



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S U M M A R Y R E P O R T

of the

TWELFTH SESSION

INDO - PACIFIC FISHERIES COUNCIL

HONOLULU, HAWAII, U.S.A.

October 3 - 17, 1966

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(Note: The material presented in this Summary Report is a precis of the Proceedings of the Council at its 12th Session and should be read in conjunction with other documents presented, particularly the Plenary Meeting Minutes, the Reports of the two Technical Committees and other relevant Working Papers. Section I of the published Proceedings of the 12th Session will contain an expanded version of the Summary Report adjusted to include the appropriate reference material. Secretary)

ADDRESS BY HONORABLE ANDREW T.F. ING
LIEUTENANT GOVERNOR
STATE OF HAWAII
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"On behalf of Governor John A. Burns and the people of Hawaii, I welcome you to Hawaii. It is a double pleasure to have the Indo-Pacific Fisheries Council 12th Session in Honolulu, for this is the first time the Council has met in the United States. We are indeed honored that Hawaii was selected as the meeting site. I hope that your stay here will be interesting for you personally, as well as productive professionally.

We, in turn, expect to profit from your visit in terms of increased knowledge and understanding which can be applied to our problems. Since the day when the ancient Polynesian navigators first came to these islands, the inhabitants have been strongly oriented to the sea. How could it be otherwise, situated as we are in the middle of the Pacific Ocean?

The early Hawaiians were skilled fishermen and had great knowledge of the ocean. They produced their main source of protein in large fish ponds. Fish was dried and was used as an item of trade. We are still dependent on the sea for such diverse necessities as transportation, recreation, and as a source of food.

The fish fauna of Hawaii is not rich with respect to the numbers of different kinds. We therefore will ask your advice during the Session as to the kinds of fishes which you think might be appropriate for introduction. Such introductions might be for establishment in natural waters or for fish culture. To give but one example of how such introductions might be useful, the landings in the skipjack tuna fishery, Hawaii's largest fishery, are sometimes limited by the supply and scarcity of live bait. If an appropriate live-bait species could be established in natural waters, or cultured, this limitation could be removed.

One of the features of this 12th Session is a Symposium on Fishery Education. This is an area in which we in Hawaii and indeed in the United States in general have had little experience compared to many of the member countries of the Council. We hope to learn and benefit from your experience and knowledge.

Although man's scientific effort is still directed upward into space, he is aware that knowledge of the oceans is the key to more efficient weather forecasting and to reaching untapped mineral and food resources of immense value.

The Federal and State governments, and private industries are intensifying their research and development programs in oceanography. In the years ahead, Hawaii expects to be among the leaders in oceanography.

It is timely then that through meetings such as this one, we can be reminded of the challenge and obligation which rests upon all of us to develop and utilize the existing and potential food resources of the oceans. As the population of the world continues to explode, we shall be forced to look more to the oceans for our foods.

While meetings for the exchange of ideas are valuable, I trust that your deliberations here will result in specific constructive actions during the coming months and years in implementation towards the attainment of the goals of the Council.

Thank you."

ADDRESS BY MR. J.C. MARR, AREA DIRECTOR
INDO-PACIFIC FISHERIES COUNCIL
12th Session, Honolulu, Hawaii
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"Governor Ing, Excellencies,
Delegates, Ladies and Gentlemen:

It is my pleasure to welcome you to the United States.

I believe it is particularly appropriate that the first meeting of the Indo-Pacific Fisheries Council in the United States be held in Hawaii. Although closer geographically to North America, Hawaii is closer biologically to the Indo-Pacific region. The fishes you will see here are those with which you are familiar in your own waters. It is obvious that Hawaii also has many cultural ties with the Indo-Pacific region and offers, I believe, proof that it is possible for East and West to achieve mutual understanding and respect. The agenda of this session of the Council includes consideration of several problems of particular importance to Hawaii.

The almost two decades since the establishment of the Indo-Pacific Fisheries Council marks the period of greatest change ever experienced by man. During this period the world population has increased by 42 percent and continues to increase at an increasing rate. Sweeping political and economic changes have taken place. There has commenced a major technological revolution, the full implications of which cannot yet even be grasped.

In order to survive in a useful way, organizations, like individuals, must be able to respond to change, must be able to meet the challenges brought by change. It is appropriate at this opening of the IPFC 12th Session to briefly mention three of the changes and challenges facing the Council.

In spite of great increases in the world fish catch, there is still a tremendous shortage of protein food-stuffs; production has not kept pace with needs. How can fishery production be increased to the maximum level consonant with sound conservation practices? What can the Council do to help bring about this increased production?

Many of the land areas bordering the Indian Ocean are areas of acute protein deficiency, yet the fishery resources of the Indian Ocean are believed to be capable of supporting vastly increased production. This paradox will be considered in January 1967 at the first session of the FAO working party for the Rational Utilization of the Indian Ocean Fishery Resources. What are the implications of this

awakened interest in Indian Ocean fishery resources with respect to the Indo-Pacific Fisheries Council? Does it represent an opportunity for increased effectiveness on the part of the Council?

The Council has recently taken on the responsibility of planning and coordinating the fishery studies to be undertaken as part of the international cooperative study of the Kuroshio, a study of the oceanography and fishery resources of a large area of the Western North Pacific Ocean. I believe this to be the first continuing operational function assumed by the Council. Is the assumption of operational functions an indication of the future course of the Council?

I raise only these three challenges and opportunities facing the Council out of the many that exist. I do not attempt to supply the answers to these questions. Indeed, only you, the delegates to this 12th Session of the Council, can provide the answers.

As hosts to this session, we naturally wish that our guests enjoy our country. In spite of the busy schedule of the session, I hope that you will have the opportunity to partake of the beauty and the hospitality of Hawaii.

I now declare open the 12th Session of the Indo-Pacific Fisheries Council."

TELEGRAM RECEIVED FROM THE PRESIDENT OF THE UNITED STATES OF AMERICA

HONORABLE LYNDON B. JOHNSON

I WANT TO EXTEND A WARM WELCOME TO THE MEMBERS OF THE INDO-PACIFIC FISHERIES COUNCIL AS YOU MEET FOR THE FIRST TIME ON AMERICAN SOIL.

THE DEVELOPMENT OF THE FOOD RESOURCES OF THE SEA IS ONE OF THE MOST CONSEQUENTIAL ITEMS ON THE AGENDA OF MANKIND. OUR RAPIDLY GROWING POPULATION DEMANDS THAT WE EXPLORE AND UTILIZE OUR VAST OCEANIC STOREHOUSE OF ANIMAL PROTEIN TO ENSURE THE WELL-BEING OF FUTURE GENERATIONS.

THE RESPONSIBILITY THIS INCURS IS PONDEROUS. BUT WITH THE GENEROUS WILLINGNESS AND READY SKILLS OF PEOPLE LIKE YOU WE SHALL SUCCEED.

ADDRESS BY MR. LEE, BONG NAI, CHAIRMAN
INDO-PACIFIC FISHERIES COUNCIL
12th Session, Honolulu, Hawaii
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"Governor Ing, Excellencies,
Distinguished Delegates, Ladies and Gentlemen:

I would like first of all, on behalf of the Indo-Pacific Fisheries Council, to express my sincere appreciation to the Government of the United States of America and, particularly to the State Department and Bureau of Commercial Fisheries, for the excellent arrangements made for us to hold the 12th Session of the Indo-Pacific Fisheries Council in this wonderful city of Honolulu.

My Council is particularly gratified that it has been possible for Mr. Andrew Ing, Acting Governor of the State of Hawaii to attend this Opening Ceremony and to present so felicitous an address.

Especially also, I would like to extend an expression of our appreciation to President Thomas Hamilton of the University of Hawaii, for honouring us with his presence and to him and Chancellor Howard P. Jones of the East-West Center for granting the Council access to the magnificent facilities of this Kennedy Hall for our Opening Ceremony and of Jefferson Hall for the main proceedings of the Council's Session.

It has been my great honour to have acted as Chairman of this Council since my election at its 11th Session at Kuala Lumpur, in October, 1964.

At the same time, I feel the heavy responsibility of presiding over this conference successfully, since it will play an important role in promoting the development of fisheries in the region, and in improving the lives and livelihood of the many people engaged in fisheries in one way or another.

Today, most of the developing nations in the region are not only realizing the importance of fisheries protein for human food and emphasizing the need for national exploitation and utilization of the world's fisheries resources, but also many of the Member Governments in the region are undertaking ambitious fisheries development plans.

I most sincerely hope that during this session the discussions on a large number of important subjects vital to the region will lead to some fruitful results through the unsparing cooperation of our distinguished delegates in a most friendly atmosphere and ideal surroundings. I am sure that with your cooperation and help we can bring about notable achievements in this session.

Finally, ladies and gentlemen I am delighted to announce that the Government of New Zealand has, within the last few days, adhered to the Indo-Pacific Fisheries Council Agreement. On behalf of all the Members of the Council, I extend a warm and hearty welcome to the New Zealand Delegation.

Thank you."

MESSAGE BY MR. F.E. POPPER

ON BEHALF OF

DR. B.R. SEN, DIRECTOR-GENERAL
OF THE FOOD & AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

AND

MR. ROY I. JACKSON, ASSISTANT DIRECTOR-
GENERAL OF FAO IN CHARGE OF FISHERIES

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Governor, Mr. Chairman, Ladies and Gentlemen:

It is my privilege to convey to you, first of all, greetings from the Director-General, Dr. B.R. Sen, with his best wishes for a most successful session. He wishes to express his gratitude to the Government of the United States of America and to the authorities of the State and the University of Hawaii for their hospitable invitation to the Council to hold its present session in such a congenial and even magnificant setting.

Dr. Sen has just recently been present at the regular FAO Regional Conference for Asia and the Far East which some of you here also attended, and which gave a good deal of attention to fishery matters. Dr. Sen wanted me to say particularly that he would have been happy to remain in the region to have been here personally today; that he regretted that urgent business required his return to headquarters in Rome. He is looking forward, however, to receiving reports on your session which he considered as being of extreme significance since this will be the first session of your Council to take place since the Conference of FAO, at its last session decided on a substantial strengthing of the role and work of FAO in the field of fisheries and took two important steps in this direction; namely, the establishment of a standing Committee on Fisheries directly reporting to the Council of FAO and the elevation of the former Fisheries Division to the status of a Department. This action by the FAO Conference spells both fresh challenges and fresh opportunities for international collaboration in fisheries. Dr. Sen is sure that your Council will take up these challenges and take advantage of these opportunities and he, on his part, is ready to offer the necessary support on the side of the Secretariat.

The second message I am to convey this morning, comes from Mr. Roy I. Jackson, since the beginning of this year Assistant Director-General of FAO in charge of Fisheries, with whom it is my good fortune to work very closely. Mr. Jackson too sends you his very best wishes for a fruitful session. He pledges the

full support of the new Department of Fisheries for any effective steps the Council may take to further necessary international collaboration in fisheries. The creation of the Department of Fisheries and the Committee of Fisheries in FAO is symptomatic of a new phase in international activities in this field. The representative of the host Government has already referred to this. The Council, the oldest of the international Fisheries bodies established within the framework of FAO, sees before itself new or newly-urgent problems and to meet them it may have to try new ways. The era during which the Council had been merely a forum for the exchange of views and information and a source of proposals for execution by individual member Governments may be coming to a close. More and more there will be demands for concerted international action in fisheries. This may require a greater concentration of the Council's attention on such matters. Such demands are finding expression in the new FAO Committee on Fisheries which has started upon its work with effectiveness and vigor. The Committee while reemphasizing that its task was to supplement rather than supplant international organizations already effectively working in the field of fisheries, nevertheless felt that the global nature of fisheries and the growing interdependence of national and regional fishery activities required the exercise of a driving force and of co-ordination which it was a task of the Committee to provide.

The Committee is seriously tackling the question of the adequacy and efficiency of existing international bodies in relation to international fishery problems and has to this purpose established a Sub-committee on the Development of Cooperation with international organizations concerned with Fisheries. It has also made a start at identifying areas and problems requiring urgent international attention. One of these - the rational utilization of the fishery resources of the Indian Ocean - is of special concern to this Council. Another specific area at which joint international action is called for and has indeed already been initiated is that of the Kuroshio. As Mr. Marr has reminded you, your Council has important responsibilities for the fishery studies to be undertaken within the framework of the international cooperative study sponsored by the IOC.

In these specific fields as well as in some of more general application which are basic to fishery development and management - for instance, fishery education and fishery institutions - your Council has important discussions to conduct at this session which, hopefully, should lead to definite recommendations for implementation by Governments. By thus bringing about necessary international action the Council can maintain its role as the leading international fishery organization in its region. In this test I can ensure it of the fullest support of the FAO Department of Fisheries. Once, more, Mr. Chairman, on behalf of Dr. Sen, Mr. Jackson, and all the fishery staff of FAO best wishes for a successful 12th Session of the Indo-Pacific Fisheries Council.

AGENDA

1. Adoption of the Agenda

2. Secretary's Report on Credentials

3. Statements by Delegations

4. Council Nominations

   4.1 Administrative Correspondents
   4.2 Technical Committee Members

5. Report of the Executive Committee

   Part A. Report on Intersession Period
   Part B. Proposals for Future Work of the Council
   Part C. Statement of Expenditure and Budget Proposals

6. Reports from Technical Committees

   6.1 Intersession Reports
   6.2 Session Reports

7. Report from 11th Session Working Parties

   7.1 Intersession Reports
   7.2 Session Reports

8. Secretary's Report on Status of the Industry

9. Amendments to the Agreement and Rules of Procedure

10. Agenda Items proposed by Member Governments

    a. Tropical Fish Culture Research Station, Malacca
    b. Introduction of exotic species with particular reference to Hawaii

11. Joint IPFC/IOC Meeting on Fisheries Aspects of C.S.K.

12. Fisheries Education (12th Session Symposium)

13. Fisheries Census

14. Rational Utilization of Fisheries Resources of the Indian Ocean

15. Items arising from the 11th Session

16. Proposals for Symposia for the 13th Session

17. Time and Place of 13th Session

18. Formal Resolutions

19. Election of Office Bearers

20. Adoption of Summary Report

OPENING CEREMONY

The official opening of the 12th Session of the Indo-Pacific Fisheries Council was held in Kennedy Hall, East-West Center, University of Hawaii, Honolulu, on Monday, 3rd October 1966.

The Honorable Andrew T.F. Ing, Lieutenant Governor of the State of Hawaii, presented an address welcoming the Council to Honolulu.

Mr. J.C. Marr, Representative of the Government of the United States of America, addressed the Delegates and guests, presenting a message from President Lyndon B. Johnson and formally inaugurating the 12th Session.

Mr. Lee, Bong Nai, Chairman of the Council, then presented his Opening Address.

Messages from Dr. B. R. Sen, Director-General and Mr. Roy I. Jackson, Assistant Director-General, Department of Fisheries, FAO, were delivered by Mr. F.E. Popper, FAO Representative.

AGENDA FOR THE 12TH SESSION

The Provisional Agenda, amended by the inclusion of two sub-items under Item 10-Agenda Items proposed by Member Governments, i.e., (a) Tropical Fish Culture Research Institute, Malacca (U.K.) and (b) Introduction of Exotic Species (U.S.A.), the inclusion of new Items 14, Rational Utilization of the Fishery Resources of the Indian Ocean (D-G, FAO), and 15, Items arising from 11th Session (U.S.A.) and the re-numbering of Items 14-16 as 16-20, was adopted.

STATEMENTS BY DELEGATES AND OBSERVERS

In accordance with the Resolution passed by the Council at its 6th Session, statements by Delegates and Observers were tabled and not presented verbally, except that in recognition of the adherence of the Government of New Zealand to the Council's Agreement and its first representation at a Council Session as a full member, the New Zealand Delegate, Mr. A.C. Kaberry, was afforded an opportunity to address the Council in Plenary Session.

The Delegate for Australia recorded his Government's appreciation of the arrangements made by the Government of the United States of America for the accommodation and servicing of the 12th Session of the Indo-Pacific Fisheries Council the services being of such kind that the Council's work would proceed with speed and efficiency; the setting for the meeting being gracious, convenient and auspicious.

The meeting in the East-West Center with its amalgam of Pacific cultures, located on the campus of the University of Hawaii, only a short distance from the Bureau of Commercial Fisheries Laboratory of the Fish and Wildlife Service, and within sight of the Pacific itself, had all in its favor. The Australian Government looked forward with confidence to useful results from a meeting so favorably accommodated.

The Delegate for Ceylon informed the Council that a newly-established Ceylon Fisheries Corporation had taken over the commercial activities previously handled by the Department of Fisheries. The Corporation was a Government institution but had complete autonomy in administration. The Corporation had taken over all the special assets previously controlled by the Department which was now limited to research, regulatory, statuatory and welfare activities. The Corporation was working on the basis of a Five-Year Plan which included the construction of three fishery harbors and several new vessels. Ceylon had recently introduced a new class of steel fishing boat with a considerably greater range than older type vessels. The Corporation was also concerned with the development of fish marketing, improved fish transportation, the import of fishing gear and the distribution of salt. Recently, a factory had been established by a private company for the manufacture of synthetic fiber nets and twine.

Le Délégué de la France réaffirme l'intérêt du Gouvernement de son pays pour les problèmes posés par le développement des pêches dans la zone d'influence du Conseil. La Nouvelle Calédonie que la France représente dans cette organisation a certes une faible population et, ceci étant dans une certaine mesure la conséquence de cela, une pêche actuelle peu importante en regard même des plus deshérités des pays membres. Mais les ressources de la haute mer de la région tropicale Sud-Ouest du Pacifique au coeur de laquelle l'île se trouve placée sont grandes. La présence de ces grandes potentialités de développement industriel est une des raisons pour lesquelles le Gouvernement français a, depuis la dernière session, considérablement développé les moyens de recherches en eaux profondes dont dispose l'ORSTOM à Nouméa. C'est aussi une des raisons de l'intérêt porté par lui aux travaux de ce Conseil.

D'autre part, l'effort du Conseil au cours de ses dernières sessions pour concentrer et rendre plus efficiente son action a été suivi avec intérêt par le Gouvernement français. Il espère vivement que cet effort se poursuivra aussi bien par un choix plus sévère encore des sujets retenus que par une meilleure répartition géographique des actions retenues.

The Delegate for India said that although production by indigenous methods did not register a significant upward trend, production by mechanized boats in inshore waters showed a substantial increase in landings and mechanized boats increased from 3,000 to 5,200 over the past two years. Exploration of both inshore and offshore grounds indicated good potentialities for increased catches on both coasts. In inland fisheries, the production of fish seed by natural collection, induced breeding with pituitary hormone and the rehabilitation and management of tanks led to considerable increase in fish seed production and, consequently, the area under fish culture. Quality control after series of experiments on the methodology was introduced for selected processed products and craft and gear research produced designs of small power boats which have been found suitable for Indian conditions. The advances made in technology and organization of fisheries administration in the country enabled India to envisage an outlay of 1140 millions of rupees on fisheries development in the Fourth Plan beginning April 1966, against an outlay of 300 millions of rupees in the Third Five-Year Plan which started in 1961. The major objectives of the Plan were to intensify fishing in offshore waters, explore the deeper waters, conduct research with special reference to mackerels, sardines and shrimps, and intensify fish seed production and development of reservoirs.

The Delegate for Japan expressed his Government's sincere gratitude to the Government of the United States and State of Hawaii for hosting the 12th Session. He emphasized the need for accelerating the increase in food production, particularly in the Indo-Pacific region where there was a need for a greatly increased supply of animal protein. He said that fisheries resources must be exploited to the maximum extent, consistent with efficient conservation, and to this end Japan was moving to the development of more efficient operations and the promotion of culture of aquatic organisms.

The Delegate for Korea expressed his appreciation to the Government of the United States for the courteous invitation to the Council to hold its 12th Session in Honolulu. He said his Government fully supported the activities and goals of the IPFC. The Korean Government took special interest in fisheries development, and under the Second Five-Year Plan, the Government had reorganized its fishery services. He thanked FAO and UNSF for establishing the Deep-Sea Training Centre which was providing properly trained fishery technicians to carry out the development plans. Further discussions were being held with the object of further expanding fisheries training, and he requested IPFC assistance in developing this program. He referred to his country's participation in CSK and briefly reviewed the present status of Korean fisheries, together with a short description of the Second Fisheries Five-Year Plan.

The Delegate for Malaysia thanked the United States Government for the opportunity to attend the 12th Session in Honolulu and expressed his appreciation to FAO for the assistance rendered in developing Malaysian fisheries. He described in some detail the development and present status of the fisheries industry in Malaysia, referring particularly to the increase in total production and the development of mechanization in the industry. He said fresh water fisheries development had been given a new impetus through intensive stocking programs and the development of research techniques resulting in the successful spawning of a number of species. Oceanic fishing enterprises were developing, and there appeared hope that problems confronting the development of trawling might be resolved to the benefit of the industry as a whole. Training for fisheries personnel was developing, and there had been an important increase in the number of technical staff recruited by the Department. He said a valuable report had been received from Dr. K. Tiews which was in the process of implementation. He briefly described the items and programs under the First Malaysian Development Plan 1966-70.

The Delegate for New Zealand said he felt it an honor to be the first Delegate to attend a meeting of the Indo-Pacific Fisheries Council. He said New Zealand is a small country in the South Pacific and is distant from the other countries of the region, and in this insular situation did not feel for many years that its problems and its fisheries had much in common with those of most other countries of the region. In fields quite outside fisheries, New Zealand has traditionally been a food-producing country. For several years now New Zealand has been moving to increase its fish production and make fuller use of its fishery resources. This year, again, the production of food fish had reached a new record level, and with developments in hand, production is expected to increase still further. In addition, New Zealand is introducing quality standards and standards of hygiene in fish handling as a basic step towards ensuring a consistently good quality product. To ensure that the industry operates with a well-found fishing fleet, New Zealand has extended the survey requirements to include vessels down to 40 feet, and, ultimately to 20 feet in length. At the same time, because the waters in the New Zealand region are stormy and vessels are ranging farther afield, a system of crew certificat and qualified crews has been introduced, the emphasis being what is required for the fishing activity as opposed to the older arrangements of what was required for the mercantile marine. These are examples of the steps being taken to pave the way for industry expansion, diversification of fishing methods and diversification of fishery products. The Delegate continued saying that as a Member of FAO, moving to expand its fishing industry, New Zealand is pleased to have been accepted as a Member of IPFC which is concerned with stimulating production from acquatic resources and New Zealand looks forward to being able to play its role in the Organization.

On behalf of the President and people of the Philippines, the Delegate for the Philippines, extending greetings to the Host Government and participants in the 12th Session, pointed out that as a charter member and staunch believer of the IPFC, his Government assured all concerned of its continuing support and cooperation. He briefly reviewed current developments in the Philippines, particularly in technology, handling and processing and development of the deep-sea fishing industry. He said that further equipment, including a research vessel, was being acquired which would promote an extensive study and research into the marine fishery resources. Considerable progress had already been made through a judicious application of the limited resources of manpower, funds and technical know-how, supported by foreign assistance. He expressed his appreciation of the aid rendered by UNSF and FAO. Nevertheless, present achievements were inadequate and there was still need for increased production from the waters.

The Delegate for Thailand expressed his Government's appreciation to the Government of the United States for sponsoring the 12th Session of the IPFC. He pointed out that Thailand had been represented at every Session of the Council and had faith in the Council's advice and recommendations for the development of the rational utilization of fishing resources and improvement of the living standards of the fishermen. He said that Thailand was facing many problems and listed the variety of programs for development which his Government was implementing. One of the limitations, however, was the shortage of trained staff, and his Government considered that FAO should place particular emphasis on this subject.

The Delegate for the United Kingdom said that Her Majesty's Government welcomed the invitation received from the Chairman and Executive Committee of the Indo-Pacific Fisheries Council to be represented at the Council's 12th Session, and to the opportunities that it afforded for exchanging views on all aspects of fisheries. The Fisheries Education Symposium at which the United Kingdom was tabling five papers, was keenly anticipated, offering as it did a unique opportunity to contribute to the advancement of fisheries techniques in the area. Her Majesty's Government was most grateful to the Government of the United States of America for their hospitality and the provision of such excellent facilities of every kind for the Session.

The Delegate for the United States welcomed the participants to the 12th Session, noting that Hawaii was an appropriate venue for a Council Session since it was closer biologically to the Indo-Pacific region than to North America. He referred to the cultural ties with many Member Countries of the Council which could lead to the achievement of mutual understanding and respect. He noted that the past twenty years had seen a population increase of 42%, accompanied by sweeping political and economical changes as well as the commencement of a major technological revolution. He pointed out that organizations, like individuals, must be able to respond to change and to meet the challenges so brought. He referred specifically to the fact that the world fish catch, despite its great increase, had not kept pace with the needs for protein and asked how fishery production could be increased and what the Council might do to bring about this increase. He referred specifically to the problem of the rational utilization of the Indian Ocean fisheries resources and suggested that it might represent an opportunity for increased effectiveness on the part of the Council, which had recently undertaken responsibility for planning and coordinating fisheries studies relating to the international Cooperative Study of the Kuroshio.

La Délégation du Viêtnam est heureuse de se joindre aux Etats-Membres pour remercier le Gouvernement des Etats-Unis d'Amérique d'avoir offert l'opportunité d'organiser la 12ème Session du Conseil Indo-Pacifique des Pêches dans ce magnifique Etat de Hawaï et souhaite que cette Session soit couronnée de succès tant sur le plan technique que sur le plan des relations internationales.

Depuis une vingtaine d'années le Viêtnam endure malgrè lui une guerre qui, tantôt est à l'état latent, tantôt passe dans une phase plus active et destructive. Cette guerre épuisante réduit dans une large mesure les moyens de production et de développement économique de notre pays. Des villages de pêches, le long des côtes, sont détruits ou obligés de se réimplanter dans des zones plus limitées, pour raison de sécurité; des Centres de Réfugiés sont créés pour recevoir les victimes des communistes car ceux-ci, par où ils passent, ne laissent que ruines et destructions.

Pourtant, parallèlement à l'action militaire, notre Gouvernement réserve d'énormes moyens de travail au secteur de production afin d'équilibrer la balance économique et commerciale. Sous cette ligne de politique générale, l'industrie des Pêches a reçu une assistance assez substancielle pour réaliser son programme de développement en accordance avec un pays en guerre. la pêche familiale et artisanale est de ce fait largement aidée sur le plan technique et financier; introduction des fibres synthétiques pour la fabrication des filets, adoption des moteurs marins pour motoriser les barques de pêche, création des stations piscicoles dans les agglomérations nouvellement formées, construction des ports de pêche avec débarcadères et marchés de poissons, création des usines de fabrique de conserve et de transformation des produits de pêche, formation des cadres, prêts aux coopératives de pêcheurs, etc.

Ainsi, malgré l'état permanent de guerre qui y règne, la production des pêches va en augmentant. La modernisation des équipements a apporté une prospérité saisissante à certains centres de pêche où les barques nouvellement construites sont d'un tonnage bien supérieur à celui traditionnellement utilisé; ces barques sont maintenant dotées de moteurs marins de grande puissance permettant aux hommes de pêcher bien loin des côtes et de rester plus longtemps sur les lieux de pêches.

Il est évident que cette pêche familiale et artisanale développée au plus haut point contribue dans une certaine mesure à l'appauvrissement progressif de la faune aquatique côtière et l'état de surexploitation qui en résulte, pourra survenir un jour très proche si nous ne prenons pas dès aujourd-hui des dispositions pour étendre les zones de pêche vers le large. A cette fin, un projet de création d'un Institut de Pêche est préparé, revisé suivant les suggestions des Techniciens du Bureau du Fonds spécial des Nations Unies et des Techniciens de la FAO, ce dit projet, en principe accepté, sera présenté à l'approbation définitive des Nations Unies à la Session de Décembre 1966. Nous espérons, avec ce projet, être en mesure de prospecter les eaux du large des côtes du Vietnam, de la Mer de Chine au Golfe de Thailande, et de donner à nos pêcheurs un rayon d'activité plus grand et par voie de conséquence, augmenter leur revenu annuel.

Enfin à la lumière des recommendations du Conseil Indo-Pacifique des Pêches, des mesures adéquates ont été prises dans le programme de développement des pêches au Viêtnam. Le Conseil qui réunit tous les deux ans les Experts et techniciens spécialisés aussi bien en matière de recherche que des pratiques

de pêche et d'organisation commerciale, continue à être l'Organisme des plus utiles pour la Région. Nous sommes ainsi persuadés que le Conseil sera en mesure d'aider avec efficacité les Gouvernements-Membres à faire face aux nouveaux problèmes posés au fur et à mesure du développement des pêches dans la Région.

L'Observateur de la C.P.S tient à apporter au Conseil les voeux de succès de cette organisation pour les travaux de la présente Session. La C.P.S. a toujours tenu compte avec intérêt dans le passé des délibérations du CIPP pour son propre programme d'aide au développement des pêches dans la région du Pacifique Sud.

La C.P.S. s'y trouve confrontée avec des situations très diverses, d'autant plus difficiles à améliorer quelquefois que les marchés considérés son très souvent de taille très réduite et que les problèmes concernent des populations plus ou moins denses mais toujours assez faibles em nombre absolu, placées dans des iles très éloignées les unes des autres. Elle tente actuellement de promouvoir l'étude de ces problèmes à l'échelle régionale et aura besoin à cet égard de toute l'aide possible: les compétences techniques du CIPP et la large documentation réunie par chaque service sont un des éléments sur lesquels compte la Commission.

The Observer for the Pacific Science Association said it was a great honor and privilege for him to express his sincere gratitude to the Government of the United States and to the State of Hawaii, who were acting as Host to this 12th Meeting of the IPFC in this city. It gave him great pleasure to welcome the Delegates, Officials and visitors to the Conference and expressed the hope that their deliberations would be fruitful and their stay here enjoyable. The battle between food production and population explosionwas most keenly fought in recent years. However, he had no doubt that the scientific and technological progress, especially in fisheries would make it possible to free the world from hunger and malnutrition. He referred to the Resolutions of the 11th Pacific Science Congress held in Tokyo during August 22 to September 3. Those of interest to IPFC had already been distributed and would be sent to the Food and Agriculture Organization by the President of the PSA and of the Congress, Professor Sin-itiro Tomonaga, in the near future. He hoped that all would give their prompt consideration to these Resolutions and was sure these would be of great assistance in the performance of the tasks of IPFC. He conveyed the best wishes of the Pacific Science Association for the success of the first Session in Honolulu.

The Observer for UNESCO thanked the Chairman of IPFC for his kind invitation to UNESCO to send an Observer to this 12th Session of the IPFC.

He assured all Delegates of the great interest that UNESCO had in the activities of the IPFC. The presence at this meeting of an Observer for UNESCO was a tradition, not purely routine; it was a practical means whereby UNESCO maintains cooperation, as far as is possible, in the furtherment of common aims to improve the application of science to the development of fisheries in the respective countries.

He noted that a joint meeting of the IOC/IPFC, devoted to the fisheries aspects of the cooperative study of Kuroshio (CSK) will occupy some part of the work during the present Session, and that such a meeting reflects, in itself, the cooperation which already exists. It stressed how much the inter-governmental body sponsored by UNESCO for Oceanic Research considers it to be important to have the views of this Council on the matter. UNESCO was also anxious to see IPFC study by what possible means this scientific venture could be made more efficient in its fisheries aspects.

He also noted that the Symposium was devoted to the subject of training and education in fisheries and was sure all knew how very actively UNESCO was engaged in the various aspects of education; and sincerely hoped that the deliberations of this Symposium might lead to defining some new ways of cooperation between the activities of this Council and those of UNESCO. He added that UNESCO was ready to assist in any form of development in the field of education, including of course any specific deliberations relating to fishery problems, as a means of fostering progress in the Region.

ARRANGEMENTS FOR 12TH SESSION

Through the courtesy of the Government of the United States of America, the University of Hawaii, the East-West Center and the United States Fish and Wildlife Service, Bureau of Commercial Fisheries, facilities for the IPFC 12th Session were made available in Kennedy Hall for the official Opening Ceremony and in Jefferson Hall of the East-West Center for the Plenary and Technical Committee meetings.

SECRETARY'S REPORT ON CREDENTIALS

Letters of credence or authorization in proper form were received from Delegations representing the Member Governments of: Australia, Ceylon, France, India, Japan, Korea, Malaysia, New Zealand, Philippines, Thailand, United Kingdom, United States of America and Vietnam.

Non-member Governments represented by accredited Observers were: Brunei, Canada.

International Organizations represented by accredited Observers were:

Pacific Science Association
South Pacific Commission
United Nations Educational Scientific and Cultural Organization
Food and Agriculture Organization.

Expression of regret at inability to attend the 12th Session were received from the Governments of Burma, Laos, Netherlands and Pakistan and from World Meteorological Organization, and the United Nations Development Program.

STEERING COMMITTEE

The Council at its first plenary meeting appointed a Steering Committee consisting of the Executive Committee and the Chairman of the two Technical Committees.

REPORT OF THE EXECUTIVE COMMITTEE

The Chairman presented the Report of the Executive Committee in three sections;

A. Administration
B. Proposals for Future Work
C. Financial Statement and Budget Estimates

Sections A and B as presented were adopted subject to the amendments of Section A, Membership of the Council, by the insertion of names of New Zealand and Indonesia, thus raising the total membership of the Council to 18 and the deletion of the third paragraph under this heading. The matter of communication with Member Governments was referred to an ad hoc subcommittee for report to the Council in plenary session.

The several proposals submitted in Section B were referred to the two Technical Committees and to the Council in plenary session as relevant.

AMENDMENT OF THE RULES OF PROCEDURE

The Delegate of Australia moved amendments to the Rules of Procedure as set out below.

The motion was seconded by the Delegate of Thailand and adopted. Delegates of Australia, France, India, Japan, Korea, Malaysia, New Zealand, Thailand, United Kingdom, United States of America and Vietnam voted in favor. The Delegate of the Philippines abstained from voting.

RULES OF PROCEDURE (as amended)

Rule X

1. stet

2. Two Technical Committees (Article III.1) shall be constituted and shall conduct their work according to the following provisions:

a - d. stet

2. (e) (New) In establishing a sub-committee or working party a Technical Committee shall determine whether the sub-committee or working party shall be ad hoc or standing and if standing shall determine the period for which it shall function, provided that in the case of any standing sub-committee or working party the Technical Committee shall at each regular Session review the need for continuance of such sub-committee or working party and may at that time modify the composition of the sub-committee or working party.

2. (f) The terms of reference of these Technical Committees shall be determined by the Council and shall always be published along with these Rules.

3. The Council may establish at regular sessions such other committees and/or working parties as may be necessary to consider such matters as may not fall within the terms of reference of its Technical Committees, or which may be common to more than one of them.

a - d. stet

3. (e) (New) In establishing a Committee or Working Party, the Council shall determine whether the Committee or Working Party shall be ad hoc or standing and if standing shall determine the period for which it shall function, provided that in the case of any standing Committee the Council shall at each regular Session review the need for the continuance of such Committee or Working Party and may at that time modify the composition of the Committee or Working Party.

4. The convening of committees and working parties referred to in paragraphs 2 and 3 above shall be subject to the provisions of Article III(3) of the Agreement.

TERMS OF REFERENCE OF TECHNICAL COMMITTEES

Arising from proposals of the 10th and 11th Sessions, and in accordance with a request from the Government of Australia the Executive Committee submitted proposals for revision of the terms of Reference of the two Technical Committees.

Following discussions in plenary session, the Council appointed an ad hoc Working Party to study the proposal in the light of the discussions. The following text proposed by the Working Party, subject to one amendment was adopted.

The Council may refer to the Technical Committees specific problems and the Technical Committees shall study and report thereon, with recommendations, for Council action. Such problems when appropriate may be dealt with in joint meetings of the committees concerned. The Council may refer to:

(a) Technical Committee I on Resources and Exploitation: specific problems of the development and proper utilization through rational exploitation of the fisheries resources and particularly dealing with (i) the physical chemical and biological factors relative to the assessment of the aquatic resources and the management of their exploitation; (ii) effects on fisheries resources of outside factors including especially those related

to human activity; (iii) increasing fish culture production; (iv) the operational and design requirements of fishing vessels and gear in relation to the nature of the resources.

(b) Technical Committee II on Fishery Economics and Products: specific problems on the development and proper utilization of fisheries production and the technological, economic and sociological factors related thereto and in particular dealing with (i) the design, construction and operation of fishing vessels and gear; (ii) economic analysis and management including statistics; (iii) fisheries institutions and services including fisheries administration; (iv) the development, utilization and distribution of fisheries products; (v) marketing; (vi) fisheries financing and credit; (vii) ancillary sociological problems related to the improvement of the status in the community of fisheries operatives.

PROVISIONAL FRENCH TEXT (TEXTE FRANCAIS PROVISOIRE)

1. Inchangé

2. **Deux Comités Techniques sont créés (voir Art.III i) et travaillent sur la base du mandat suivant :**

a - d. inchangés

(e) Lors de la création d'un sous-comité ou d'un Groupe de Travail, le Comité Technique concerné décide si cet organisme est ad-hoc ou permanent. Dans le deuxième cas le Comité Technique fixe la durée de ses activités étant entendu qu'à chacune de ses Sessions ordinaires le Comité Technique détermine s'il y a lieu de maintenir ou non le mandat de ces Sous-Comités ou Groupes de Travail s'ils sont permanents, cette décision pouvant s'accompagner d'une modification dans la composition des Organismes ainsi visés.

(f) Le mandat de ces comités techniques est fixé par le Conseil et est toujours publié avec le présent Réglement.

3. **Le Conseil peut créer, à une session ordinaire, tous autres comités ou groupes de travail qui lui paraissent nécessaires pour examiner les questions n'entrant pas dans le mandat de ses comités techniques ou qui relèvent simultanément de de la compétence de plusieurs de ces comités.**

a - d. inchangés

(e) Lors de la création d'un Sous-Comité ou Groupe de Travail le Conseil décide si cet organisme est ad-hoc ou permanent; dans le dernier cas le Comité Technique fixe la durée de ses activités, étant entendu qu'à chacune des Sessions Ordinaires le Conseil détermine s'il y a lieu de maintenir ou non le mandat de ces Sous-Comités ou Groupes de Travail cette décision pouvant s'accompagner d'une modification dans la composition des organismes ainsi visés.

4. La convocation des comités et groupes de travail mentionnés dans les paragraphes 2 et 3 ci-dessus est subordonnée aux dispositions de l'article III de l'Accord.

ATTRIBUTIONS DES COMITES TECHNIQUES

Le Conseil peut renvoyer aux Comités Techniques des problèmes particuliers, et les comités techniques les étudieront et présenteront sur ces problèmes des rapports accompagnés de recommandations pour décision du Conseil. Ces problèmes peuvent, si nécessaire, être traités par les comités intéressés en réunions mixtes. Le Conseil peut renvoyer:

(a) au Comité Technique I des Ressources et de l'Exploitation, les problèmes particuliers au développement et à la bonne utilisation des ressources des pêches par leur exploitation rationnelle, et concernant notamment:

(1) les facteurs physiques, chimiques et biologiques relatifs à l'évaluation des ressources aquatiques et à l'aménagement de leur exploitation;

(2) les effets sur les ressources des pêches des facteurs extérieurs, notamment des facteurs relatifs à l'activité humaine;

(3) l'accroissement de la production de la pisciculture;

(4) les caractéristiques désirables dans la conception et l'utilisation des bateaux et engins de pêche en fonction de la nature des ressources.

(b) au Comité Technique II des aspects économiques des pêches et des produits de la Pêche, les problèmes spécifiques du développement et de l'utilisation rationnelle de la production des pêches, et les facteurs technologiques, économiques et sociologiques qui s'y rattachent, concernant notamment:

(1) la conception, la construction et le fonctionnement des bateaux et engins de pêche;

(2) l'analyse économique et l'exploitation, y compris les statistiques;

(3) les institutions ou services des pêches, y compris l'administration des pêches;

(4) le développement, l'utilisation et la distribution des produits de la pêche;

(5) la commercialisation;

(6) le financement et le crédit en matière de pêche;

(7) les problèmes sociologiques connexes relatifs à l'amélioration de la condition des collectivités de pêcheurs.

AMENDEMENT OF THE COUNCIL'S AGREEMENT

The Secretary advised the Council of receipt of a proposal from the Government of Australia for the amendment of the Council's Agreement.

In view of the fact that adequate notice of this proposal could not be given to Member Governments prior to the current Session it was held that consideration of the proposal should be deferred until the Council's 13th Session.

The Secretary was requested to circularize all Member Governments on the subject.

COMMUNICATION WITH MEMBER GOVERNMENTS

The Council considered the question of communication with Member Governments during intersession periods and adopted the following policy directives:

(a) that communication with the Member Governments on technical matters be made directly with the Government's officers nominated to the Council's Technical Committees, and on administrative matters, with the Government's officers nominated as Administrative Correspondent; provided that the Administrative Correspondents were also kept informed, by copy, of communications addressed to other government officers;

(b) that the Council may establish at regular sessions such other committees and/or Working Parties which the Council considers important and necessary, and the terms of reference of which, laid down by the Council at the time of their establishment, may not be fulfilled on the basis of communication by correspondence alone. Of course, when such sub-committees are appointed the Secretariat may communicate with Members of such bodies, subject to the requirement to keep the Administrative Correspondents informed of such exchange.

PUBLICATION OF COUNCIL DOCUMENTS

The Council recommended the publication of the Inter-Session Reports of Technical Committees I and II as Occasional Papers or in Section I of the Proceedings at the discretion of the Secretary.

The Council decided that technical papers presented at the 12th Session should be published as follows:

(a) In full in the Proceedings
Numbers: 1, 5, 7, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 31, 34, 35(b), 36, 37, 39.

(b) As Occasional Papers
Numbers: 4, 11, 12, 13, 32, 35(a), 38, 40.

(c) To be incorporated in Inter-Session Report of Technical Committee II
Numbers: 28, 29, 30.

(d) As Special Article in C.A.B.
Numbers: 2, 3.

(e) To be returned to authors as unsuitable for any of the above classifications
Numbers: 8 - requires further review in relation to literature on animal facts
9 - possible basis for extension circular for use in home country
10 - possible basis for extension circular for use in home country
14 - might be submitted to chemical trade journal.

The Council recommends that the papers TECH. 6 and 33 should be compiled, with the paper on the resources of the CSK Region presented at the Council's 11th Session, and with papers on the resources of the central sector and on the pelagic high-seas resources of the Indian Ocean; to this material should be added material drawn from papers on national unit-fisheries presented to the Council. The Council decided to request Dr. Tham Ah Kow to prepare the paper on Central Sector resources and was informed that Drs. Shomura and Kikawa will prepare a paper on the Indian Ocean pelagic high-seas resources. The Committee also proposed that the authors of these papers should act as an editorial working party to prepare this compilation and that Dr. G.L. Kesteven should be convener of the party. Publication of the final document should be in the IPFC Regional Studies series.

ITEMS ARISING FROM THE 11TH SESSION

This Item introduced by the Delegate for the United States of America related primarily to recommendations submitted by the Council to FAO. The Secretary for Technical Committees I and II indicated that most of the items listed for consideration had been covered in the Inter-Session Reports of Technical Committees I and II, and it was regretted that it had not been possible to distribute these documents prior to the Council's Session.

Specifically the request for a training center on induced spawning would be covered in part by a seminar to be held in U.S.S.R. 1967 on genetic selection and hybridization of fish.

On the question of fishery oceanography FAO was moving to meet the request, and experts in fisheries oceanography had been recruited for Aden, Pakistan and India.

On the question of pollution, it was reported that the FAO was preparing a study on national legislation covering this subject and the first draft of the study had been distributed to experts for comments and discussion. Further, FAO is cooperating closely with WHO on the matter of insecticides and their effects.

On the question of the proposed seminar on fishery credit, a proposal had been submitted for consideration by UNDP under the 1967-68 program and Governments would be advised of the outcome of the negotiations.

SYMPOSIUM ON FISHERIES EDUCATION

A. ARRANGEMENTS FOR THE SYMPOSIUM

At the 11th Session of the Council a decision was taken that the Symposium subject at the 12th Session should be Fisheries Education, and Dr. G.L. Kesteven was appointed as Convenor of the Symposium. In response to the prospectus issued by the Convenor, some 40 papers were contributed, of which 30 were from countries within the region and 10 were from countries outside the region.

Dr. W.F. Hampton was appointed Chairman of the Symposium and was assisted in his work by a small working group. The subject matter of the Symposium was dealt with under the following headings:

I. Planning for Fisheries Education and Training

A. Fishery occupations and the knowledge and skills required for them

a. Schedule of occupations, job specifications (statement of duties)

b. Standards of proficiency

c. Subjects in which there is to be training for each occupation

Rapporteur: A.C. Bogg

Discussion Leaders: J.W. Cobble
T. Ino

B. Manpower requirements for development, growth and stability; assessment of proficiency lag

a. Methods of estimating numbers required in each occupation

b. Determination of priorities among occupations

c. Planning the trainee throughput

Rapporteur: D. Menasveta

Discussion Leader: G.L. Kesteven

II. Conduct of Education and Training Programmes

A. Types of programmes and subject content

a. Curriculum, Syllabus, course

b. Programmes and timetables

c. Duration of courses

d. Entrance requirements

e. Graduation standards

Rapporteurs: B. Muir
G.I. Murphy

Discussion Leaders: L.C. Devambez
D.N.F. Hall
R. Van Cleve
T. Yamamoto

B. Management of Programmes

a. Student numbers

b. Buildings (teaching and domestic accommodation)

c. Ships

d. Staff qualifications; training

e. Organization

f. Finance

Rapporteur: D.N.F. Hall

Discussion Leaders: W.F. Hampton
A.S. Timbol
Soong Min Kong
G.N. Mitra
T. Ino

C. Educational methods and equipment

a. Audio-visual aid

b. Textbook

Rapporteur: D.N.F. Hall

Discussion Leader: D.A. Lubitz

D. International aid and opportunities

Rapporteur: D.N.F. Hall

Discussion Leader: F.E. Popper

III. Assessment of the Efficacy of Education and Training Programmes

A. Wastage

a. In course (students who fail to "graduate")

b. Post-graduate (students who move to other industries; but this may not be a real loss to community)

B. Indices of production, productivity and efficiency (assessment of the gains in these attributable to training)

a. At level of the individual trainee

b. At level of the operating unit in which trainees are employed

c. At level of unit fishery, group of unit fisheries, or entire industry

C. Cost/benefit ratio

a. For extension programmes

b. For institutionalized programmes

Rapporteur: A.C. Bogg

Discussion Leaders: D. Menasveta
E.S. Holliman
E.P. Ho

The symposium took place on October 5th and 6th, with morning and afternoon meetings, and on the evening of October 5th films and slides were shown. Grateful acknowledgement must here be made of the contributions made to the Symposium by Mr. D.A. Lubitz, Dr. G.I. Murphy and Dr. B. Muir of the University of Hawaii. Also the Council was especially appreciative of the display of audio-visual equipment set out by various business enterprises and of the display of books provided by the British Council, by the United States Fish and Wildlife Service and by the Japanese Fisheries Agency.

B. SUMMARY OF MAIN POINTS RAISED IN THE DISCUSSION

It was recognized in the Symposium that the primary objective of the educational program in any country was to develop the proficiencies of operatives and personnel that would lead to increased fish production and improved utilization of fish and fishery products. In the main, participants considered that the basis of fishery education programs should be the training of fishing boat personnel, but strong arguments were presented for the training of administrative field staff, especially those required for extension programmes. A case was also made for training in the management of fishery enterprises. The participants agreed that the training of trainers constituted a major part of the problem of fisheries education in the region. It was emphasized that the planning of fisheries education programs had to be closely coordinated with the general fisheries development plan of a country and should be shaped within the context of such program. It was also agreed that in planning an education program for a particular country, the likely lines of future technological development should be studied so that training should be aimed at meeting effectively the needs of such development. The participants agreed that there were certain unique skills required in fisheries not only in the conduct of fishing operations at sea but in certain activities on land, and that whilst training for many occupations can be included in a country's general educational and training program, special arrangements have to be made for many of the fishery occupations.

There was considerable detailed discussion of administrative and other aspects of the conduct of education and training programs and the detailed report of the symposium will undoubtedly furnish valuable material for the use of Member Governments. These discussions dealt with such matters as student-staff ratio, the nature of accommodation required and the qualifications of teachers. On the last point, a special reference was made to the desirability of having teachers who are able to go to sea. There was useful discussion of audio-visual aids and textbooks, and with respect to the latter, participants gave an account of special needs such as for instruction manuals to be made available to fishermen in the national languages. A detailed account was given of current arrangements at international level for providing assistance in education programs and participants gave some account of the difficulties they encounter in ascertaining what aid was available and how they might gain access to it. The participants welcomed the suggestion that a meeting should take place of countries that could give aid and suggested that countries seeking aid should also be represented at such a meeting, and that the meeting should produce a directory of internationally-available aid and aid-giving organizations, with details of the methods and procedures for applying for such aid.

The participants recognized that there was some wastage during the training courses and after graduation from them, but the view was generally held by the participants that trained persons, although not available to the fisheries, were valuable to the economy generally and therefore should not be regarded as a loss to the community.

Although the participants could not enter into details with regard to the techniques for assessing the efficiency of training programs and the cost-benefit ratio of any particular program, they agreed that methods should be developed for this purpose and applied within the region.

C. CONCLUSIONS

In the light of the discussions that took place in the Symposium, the Council:

I. Recommends to FAO that continuing emphasis should be given to development of its fishery education and training activities. The Council believes that Member Governments of the IPFC region and the Council itself should be able to obtain advice and assistance on education matters from the FAO.

II. Endorses the suggestion that a meeting should take place of countries giving aid in fisheries education but suggests that countries seeking such aid should be represented at the meeting. It hopes that as a result of the meeting a directory will be prepared furnishing detailed information on educational aid and opportunities in fisheries at international level.

III. Recommends that one or more educational centers should be established in the Indo-Pacific region for purposes such as:

a) the training of extension officers and other training staff;

b) preparation of audio-visual aids, texts, etc;

c) preparing a map of the location of educational centers;

d) making a comparative study of curricula and courses for fisheries;

e) giving support to experts rendering assistance to Member Governments;

f) providing information and advice to Member Governments.

IV. Requests the Executive Committee to accept a continuing charge with regard to education and development. In this connection, the Committee is requested to maintain contact with FAO with regard to implementation of the recommendations drawn from the Symposium discussions and to assist the organization in this work. In particular, the Committee should collaborate in any plans for the establishment of the education center and be available to assist the consultant appointed to prepare the report referred to in recommendation V. The Council further suggests to the Committee that in this section of its work it might seek assistance from Dr. R. Van Cleve and others specialized in the field of fisheries education.

V. Requests FAO to appoint a consultant to prepare a report, based on this Symposium and making use of the papers presented and the record of discussions that took place. The Council suggests that this consultant should visit one or two countries such as Malaysia and Thailand in order to make detailed country studies following the pattern of the Symposium outline and should incorporate the results of the studies in his report. The resulting work should, in the view of the Council, constitute an exceedingly useful manual on the problems and methods of fisheries education.

REGIONAL FISHERIES CENSUS

The Council was given an excellent summary by Dr. T Yamamoto of the problems and developments in planning a regional fisheries census in relation to the 1970 World Census of Agriculture. It was pointed out that the FAO resources and staff in statistics were not available to conduct such a regional fisheries census; however, considerable interest has been demonstrated by several of the Member Countries in better fisheries data collection and statistical surveys. In view of the importance of the fisheries census in relation to improving fisheries data collection in a number of Member Countries, the need for further action was considered under the heading Fisheries Statistics.

INDIAN OCEAN RESOURCES

The Council noted that the FAO Committee on Fisheries at its 1st Session had considered the question of the Rational Utilization of the Fishery Resources of the Indian Ocean, had established a Working Party of selected countries to study this problem in detail and to prepare proposals for further action, and had requested that the views of the IPFC on the subject matter of the Working Party should be ascertained. The Council was informed that the Working Party would meet in Rome in January 1967.

The Council, in considering the fishery resources of the Indian Ocean, recognized four "sectors" of the Indian Ocean Fishery Resources and Industries; namely, (1) Asian-Australian Coastal, (2) African-Arabian Coastal, (3) Pelagic, and (4) Antarctic. Oceanographically, and with respect to pelagic resources, the Indian Ocean must be regarded as a single unit with the exception of the Antarctic, which, on geographic and other grounds, the Council decided to set apart altogether. In any case, the Antarctic is at present the responsibility of the International Whaling Commission and various other international bodies.

The coastal resources are, more or less, homogeneous from Port Elizabeth in Africa northward and then eastward around to Exmouth Gulf in Western Australia, and biologically could be treated as a single entity. However, assessment and management of these resources would have to be carried out in separate sectors; more especially, the resources of the East African and Arabian coasts would have to be treated separately from those of Asia and Australia. This would be because the stocks of the African coast are independent of those of the Asian coast and because their exploitation is carried out by a separate group of countries.

A major sector of the Indian Ocean resources consists of the tunas, marlins, sharks and other pelagic species of the high seas, and indeed it is with respect to assessment of these resources and possible management of their fisheries that this question has arisen. The Council felt that this group of resources required attention most immediately, but that promotion of the rational utilization of the Asian-Australian coastal resources also was a matter requiring attention.

With respect to both the coastal and pelagic sectors the Council's interest is primarily in the commercially important species and whilst this would not exclude from the investigations consideration of other species the Council considers that it should emphasize that in recommending investigations of resources it gives first priority to the commercially important species.

The Council was of the opinion that any body responsible for the programming and coordination of high-seas fishery investigations in the Indian Ocean would be in need of expert advice. It accordingly nominated Dr. F. Talbot, Mr. R.S. Shomura, Dr.H. Yabe and Dr. D. Menasveta to form a group of experts for this purpose, with Mr. Shomura to act as Convenor of the group. The Council recommended to the Director-General of FAO that he call a meeting of the group in Rome in January 1967 so that its advice could be made directly available to the Working Party on the Rational Utilization of the Fishery Resources of the Indian Ocean and it requested the Convenor meanwhile to establish contacts by correspondence among the Members of the group to enable it to prepare for its proposed meeting. The Council requested the Director-General to make arrangements in consultation with the Chairman of the Council

for such further meetings of the group as might appear to him to be advisable between January 1967 and the next Session of the Council.

Regarding the kind of international body (existing or new) needed to carry out the relevant investigations and to promote the rational utilization of the fishery resources, the Council saw three possible alternatives.

The first alternative was to take such steps as would be required to enable the Council itself to carry out the necessary work. The Council considered that it would be necessary that certain countries having a direct interest in the resources of the Indian Ocean but which are not at present Members of the Council should also participate in this work. If the Council were to carry out this work, these countries should be invited to become Members. The Council noted that under its present Agreement, Member Nations and Associate Members of FAO and such non-member nations of FAO which are Members of the United Nations could assume membership in the Council through acceptance of the Agreement, provided that in the case of nations not Members of FAO, the Council must admit them by a two-thirds majority of its membership.

With regard to investigations of the Fishery Resources of the Indian Ocean necessary for assessment of their potential and as a basis for rational exploitation, the Council was of the opinion that these would have to be carried out mainly by continuation, extension and better coordination of investigation programs already initiated by several of the interested countries. In the particular case of the pelagic species of the high seas, coordination and programming of the investigations could best be entrusted to a special subcommittee of the IPFC, if the investigations should become the Council's responsibility. To be prepared for such a contingency the Council accordingly decided to establish such a subcommittee, to be known as the Subcommittee on Pelagic High Seas Fishery Resources of the Indian Ocean, to consist of such Members of the IPFC as declared their interest in these resources. The Subcommittee would be convened by the Director-General of FAO in consultation with the Chairman of the Council, if and when such action appeared desirable to him in the light of the conclusions reached by the FAO Committee on Fisheries or its subsidiary bodies on this matter.

The Council was of the view that the programming and coordination of investigations into the high-seas fishery resources of the Indian Ocean, if undertaken under the aegis of the Council, should be considered as a cooperative research and development project within the meaning of Article IV, Paragraph e, of the Agreement. The Council further considered that the expenses incurred in this connection, especially those arising from the activities of the Subcommittee on Pelagic High Seas Fishery Resources of the Indian Ocean, the appointment of experts and other staff to assist in its work and from joint research activities that could not conveniently be charged directly to the participating countries, should be paid from a trust fund to be established in accordance with Article VII, Paragraph 4, of the Agreement. Members of the Subcommittee should contribute to the trust fund according to a scale to be agreed by the Subcommittee on the basis of proposals to be submitted to it by the Director-General.

The alternatives to the proposals outlined above are, first, to establish a new intergovernmental body to deal with the pelagic high-seas resources of the Indian Ocean alone; second, to establish a new intergovernmental body to deal with all the fishery resources of that Ocean.

A new high-seas resources body would have a more limited membership than the IPFC would need to have, if it were to deal with these resources effectively. The new body could also, right from the beginning, make provision not only for the required finance, but also for the exercise of functions relating to the regulation or management of the exploitation of the fishery resources whereas such provisions would have to be introduced into the Agreement of the IPFC if it were to discharge the functions mentioned. The creation of a new body for the pelagic high-seas resources of the Indian Ocean would, however, have not only the disadvantages inherent in adding to the already considerable number of inter-national fishery bodies, but would specifically make it necessary for eight (8) Members (Australia, Burma, Ceylon, India, Indonesia, Malaysia, Pakistan and Thailand) of the IPFC to participate both in its work and in the work of the new body.

The creation of a new body to deal with all of the fishery resources of the Indian Ocean would avoid the last-mentioned disadvantage, but would involve the bringing together of countries with widely divergent interests in regard to coastal and inland resources and with respect to problems of fish processing, marketing and various socio-economic questions while dividing the existing membership of the IPFC who have many common interests in these fields.

The Council felt it would be desirable to review the work now being carried out in the investigation of the coastal resources of the Indian Ocean and promo-tion of their rational exploitation, which, in the opinion of the Council, was best undertaken by groups of countries concerned, which, at least as regards the Asian-Australian resources, could be formed within the framework of the IPFC. The Council decided to put this question on the agenda of its next Session and requested the Secretary to assemble relevant information and to make it available to Member Countries.

In summary, and with reference to the points enumerated in Resolution COFI/1/2, establishing the Working Party on the Rational Utilization of the Fishery Resources of the Indian Ocean, the Council's observations and recom-mendations are as follows:

(a) The whole area of the Indian Ocean, with the exception only of the Antarctic, requires attention; but the tunas, marlins, sharks and other pelagic species of the high seas require such attention more immediately.

(b) The necessary investigations should be carried out mainly by con-tinuation, extension and better coordination of existing programs of interested countries; they should be concentrated on commercially important species; expert advice will be needed and some will be available from a group of experts nominated by the IPFC.

(c) Three alternatives exist regarding the body to carry out such in-vestigations and these are examined in the Report of the Present Session of the IPFC; the Council has proposed or taken such action as would be necessary if the Council itself were to undertake this responsibility.

(d) The Council has made financial proposals to be adopted in this case.

(e) & (f) No specific observations are offered on these points.

JOINT IPFC/IOC MEETING

Arising from a request addressed to it by the Intergovernmental Oceanographic Commission, the IPFC organized a joint meeting between the two bodies at its 12th Session.

Arising from the discussion, the meeting prepared the following report that was presented to the Council at its Plenary Session.

RECOMMENDATIONS FROM THE JOINT IPFC/IOC MEETING ON FISHERY ASPECTS OF CSK

HONOLULU, 7-10 OCTOBER 1966

With respect to the important species selected at the Third Meeting of the CSK International Coordinating Group (Tokyo, August 1966), the Joint Meeting took the following actions:

1. Saury (Cololabis saira)

   A. Endorsed the action of the CSK Assistant International Coordinator for Fisheries (AICF) in working with FAO to arrange for the preparation of a Species Synopsis, and

   B. Agreed that subpopulation studies were of highest priority, including especially the relationship of the saury of the western Pacific to those of the Sea of Japan and the relationship of fish in these two areas to those to the east; the AICF is to work with the appropriate individuals in the countries concerned to coordinate the details of such studies.

2. Skipjack tuna (Katsuwonus pelamis)

   A. Agreed that subpopulation studies were of highest priority, including studies of the association of particular subpopulations with particular water masses or types, and

   B. Noted that cooperative studies of skipjack subpopulations, based on the study of blood-group systems and serum constituents, were already in progress between the Japan Fisheries Agency and the U.S. Bureau of Commercial Fisheries Honolulu Laboratory, and

   C. Urged other participating countries to cooperate by providing blood collections where possible according to instructions available from FAO and the Honolulu Laboratory, making use of collecting and shipping kits available from the Honolulu Laboratory, and

   D. Noted also plans of the Japan Fisheries Agency to supplement these studies with tagging experiments.

3. Spanish mackerel (Scomberomorus commersoni, S. lineolatus, S. guttatus)

   A. Agreed that there was need for a Species Synopsis and requested the AICF to work with FAO in arranging for the preparation of a Synopsis, and

B. Agreed that there was need for the services of a taxonomic specialist in identifying Scomberomorus specimens and noted the offer of Mr. W. Chan, Hong Kong, to provide such services, and

C. Agreed that much useful information could be obtained on range and seasonal distribution through a questionnaire system of the kind employed by Thailand and Vietnam and requested these and other interested countries to exchange information on the forms and system used and the information obtained through their use.

4. Chub mackerel (Rastrelliger kanagurta, R. brachysoma, R. faughni).

A. Agreed that there were still pressing taxonomic (and nomenclatorial) problems for this genus and requested the AICF to locate a taxonomic specialist in this group willing to provide taxonomic services for collections (including juveniles as well as adults) sent by interested countries.

5. Yellow croaker (Pseudosciaenia manchurica)

A. Agreed that subpopulation studies were of the highest priority and that these might most appropriately be carried out by tagging experiments, but

B. Recognized that the methodological problems of tagging yellow croaker must be solved before such experiments are feasible and encouraged the countries concerned to investigate the feasibility of tagging small yellow croaker in shallow water.

6. Lizardfish (Saurida tumbil)

A. Endorsed the action of the AICF in working with FAO to arrange for the preparation of a Species Synopsis.

7. Goldenthread (Nemipterus virgatus)

A. Endorsed the action of the AICF in working with FAO to arrange for the preparation of a Species Synopsis, and

B. Requested close cooperation on the part of countries carrying out tagging experiments and countries in which tagged fish might be recovered, and

C. Recognized the desirability of a "universal symbol" to be used on tags and the need for agreement between countries whereby the country in which the tagged fish was recovered would pay a reward to the fisherman returning the tag, and

D. Recognized the potential value of a "training film" in promoting the return of tags by fishermen and requested Dr. C. L. Kesteven, Australia, to investigate the possibility of having such a film prepared.

In addition to these actions on particular species, and with respect to a survey of the bottom resources of the South China Sea, the Joint Meeting took the following actions:

1. Agreed that it was desirable to summarize all existing information on the results of trawling in the South China Sea and requested Dr. D. Menasveta, Thailand, to undertake such a summary. In this connection,

   A. Mr. W. Chan, Hong Kong, agreed to provide a reference to data published by scientists in Taiwan, and

   B. Dr. T. Ino, Japan, and Mr. J. Marr, USA, agreed to try to locate a report on pre-World War II trawling by Japan in the South China Sea, and

   C. The AICF offered to be of assistance in reproducing copies of data.

2. Agreed that the CSK Coordinating Group should provide assistance in planning and coordinating future trawling studies in the South China Sea.

With respect to data on common-use resources, and particularly those selected as important species, the Joint Meeting took the following actions:

1. Agreed that there are needed, on a resource basis rather than a country basis, adequate time-series data on (a) catch, (b) effort, (c) age composition, and (d) length composition, agreed to provide these (to the extent available) to the FAO Fishery Data Center, and

2. Requested the AICF to ascertain the precise nature of the data available for each species and to communicate this information to the FAO Fishery Data Center, and to request the FAO Fishery Data Center to provide (a) guidelines for the submission of such data to the Center and (b) a "readout" service, to provide copies or summaries by species upon request.

With respect to the question of how CSK oceanographic observations can best be made for use in fishery studies, the Joint Meeting took the following actions:

1. Recognized (a) the close relation between oceanographic studies and the development of fisheries and (b) the fact that in many CSK countries the responsibility for these subjects rests in separate organizations, and

2. Recommended that, in the implementation of all aspects of the CSK, participating countries make every effort to

   A. Arrange the closest possible collaboration between the organizations concerned with oceanography, hydrography, meteorology, fisheries resources research, and marine biology, and

   B. Ensure the regular exchange of relevant data and information between these organizations, and

C. Ensure that programs of research undertaken by any of these organizations take into consideration the needs of the others.

With respect to the continued responsibility on the part of the Indo-Pacific Fisheries Council for the fishery aspects of the CSK, the Joint Meeting took the following actions:

1. Recommended that the Council establish a Working Party on CSK Fishery Aspects, with the following individuals to serve in their capacities as experts: T. Ino (Japan), Hak Soo Han (Korea), D. Pathansali (Malaysia), I. Ronquillo (Philippines), D. Menasveta (Thailand), W. Chan (U.K.-Hong Kong), J. Marr (USA), Tran Van Tri (Vietnam), and

2. Agreed that the terms of reference of the Working Party should be

   A. Individually to maintain liaison between national institutions engaged in CSK studies and the UNESCO/IOC/CSK.

   B. Jointly (i) to review progress in the conduct of work proposed at the Joint Meeting, Honolulu, October 1966.

   (ii) to advise UNESCO/IOC/CSK on the fisheries aspects of CSK studies.

   (iii) to report to IPFC on the fishery aspects of CSK.

3. Urged that high priority be given by the Council and FAO to provision for meetings of this Working Party during the Inter-Sessional period.

The Council received and endorsed the Report and appointed the Working Party on CSK Fishery Aspects as recommended.

TRAWLING

The Council decided to draw the attention of Member Governments to the considerable production obtainable for the demersal stocks of the continental shelf of South East Asia and that, whilst there was good evidence on which Governments could act to promote these fisheries it was desirable to obtain data on which to base estimates of the prospective total yield from these resources. Accordingly the Council decided that the Working Party on Trawling should continue to function and that its membership should be:

Dr. A. Sribhibhadh (Thailand) Chairman
Mr. A. Stark (Australia)
Mr. A.S. Mendis (Ceylon)
Mr. B. Rao (India)
Dr. S. Shindo (Japan)
Mr. T.J. Koh (Korea)
Mr. D. Pathansali (Malaysia)
Mr. P. Caces-Borja (Philippines)
Mr. W.L-Y. Chan (Hong Kong)
Mr. Tran Van Tri (Vietnam)

The terms of reference of this Working Paper should be as follows:

1) To compile data on yields from the various demersal grounds of Southeast Asia.

2) To promote the collection of statistics and to assemble sets of statistics drawn from trawling operations in the region.

3) To promote and as it sees fit to carry out an analysis and interpretation of the statistics.

It was noted that Dr. Deb Menasveta had been requested under the CSK programme to compile statistics on trawling on the Sunda Shelf fisheries, the Working Party was requested to collaborate with him.

BENTHIC STUDIES

The Council noted that relatively few studies of benthic communities had been made in the course of fisheries research in the IP region and indeed generally in the world. The Council considered that in view of the actual and prospective importance of benthic communities, steps should be taken to remove this deficiency and improve the situation. It was of the opinion that the current situation of this work was due largely to the cost of such research and to a failure, attributable to various causes, to develop and standardise the equipment and methods of such research; it was further of the opinion that the theory of benthic communities, especially of those of tropical and sub-tropical waters, was in need of development. The Council was of the opinion that many fishery programmes of the region would benefit if a programme could be instituted for:

A. Improvement and standardization of equipment and methods of benthic research.

B. Development of the theory of benthic communities, with special reference to those of tropical and sub-tropical waters.

C. Provision of training in this field.

The Council requests the Director-General of FAO to draw the attention of UNESCO to this problem and to the views expressed by IPFC and to request UNESCO to ensure that these problems receive special attention within its programme of oceanography.

INTRODUCTION OF EXOTIC SPECIES

The Council noted the real need of Hawaii to increase and improve its aquatic fauna and at the request of the Host Country recommended for experimentation the following indigenous and exotic species of aquatic animals to meet the requirements of biological control of aquatic vegetation, improvement of food fish fauna and increased availability of forage organisms.

Potential live-bait fishes:	Grey mullets (*Mugil* spp., *Liza* spp.) Milkfish (*Chanos chanos*)
Sport fishes:	Indian Mahseer (*Barbus* (*Tor*) *tor*)
Biological control of aquatic weeds:	Grass carp (*Ctenopharyngoden idella*)
Shellfish as human food:	*Meretrix lamarckii* *Ostrea nippona* *Anadara subcrenata*, *A. granosa*
Forage animals of introduced species:	*Macrobrachium lanchesteri* *Macrobrachium rudis*

It was also felt that since the snappers and groupers introduced in the coastal waters have established themselves, more intensive stocking operations may help in building up larger populations. The Council also took note of the recommendations of the FAO World Symposium on Warm-Water Pond Fish Culture held in Rome, that a Central Registry of fish introductions be established and suggested that the Host Country furnish relevant information to this Registry when established.

RASTRELLIGER

The Council recommended to interested Member Countries that their existing research programme on *Rastrelliger* be strengthened and extended especially by adopting a common, agreed approach to the identified problems in particular endorsing the following lines of action:

1. A preliminary trial of tagging methods should be conducted in the current season by Ceylon, India, Thailand and Malaysia. The Delegate of Australia indicated that he could probably provide suitable tags for this operation.

2. A programme of aerial spotting, tagging and of biological and oceanographical observations should be initiated as from October 1967 and that for this purpose

   A. Preparations be initiated without delay to arrange for equipment, personnel, funds, etc., required for this operation and to draw up an outline work plan for it;

   B. That a meeting be convened if convenient in April 1967 to establish agreement on the details of this operation; and

   C. That an approach be made to Colombo Plan authorities to provide the services of aerial fish spotters and the loan of radio-telephone equipment for this programme.

3. That the results of these operations be reported to the IPFC at its next sessions.

4. That the Council appoint a Working Party to be responsible for the foregoing programme. This Working Party to consist of:

D. Pathansali - Malaysia
D. Menasveta - Thailand
L. Tisseverasinghe - Ceylon
G.N. Mitra - India (Convenor)
G.L. Kesteven - Australia

TUNA

The Council decided not to reappoint the Working Party on Tuna. However, it endorsed the proposals set out by the FAO Expert Panel for the Facilitation of Tuna Research and recommended to Member Governments that they arrange for the supply of tuna specimens to the E.P.F.T.R. Working Party on Tuna Taxonomy.

FISH PROTEIN CONCENTRATES

The Council requested FAO to keep Member Governments informed of latest developments in this field.

FISH PROCESSING RESEARCH

The Council supported the 11th Session proposal on the promotion of fish processing research and requested the Fisheries Office, Bangkok to advise Member Governments on specific research problems.

The Technical Secretary was requested to maintain contact with Member Governments in respect of fish processing developments in their countries.

SALT

The Council requested FAO to provide technical information on production of salt suitable for fish curing to Member Governments.

FRESH FISH PRESERVATION (APPENDIX V)

The Council noted the Report of the Working Party on Fresh Fish Preservation and wished to commend the Working Party for its excellent analysis of regional problems in fresh fish handling and preservation.

The Council suggested that Member Governments consider the recommendations for application in their fisheries and urged that these, with the exception of the second, eighth and tenth recommendations, be implemented by the Member Governments to the fullest extent practicable and desirable. It was further suggested that the FAO Regional Fisheries Officers maintain close contact with the Member Countries on these developments, supply any needed advice or information on implementation of the recommendations, and report progress to the 13th Session of the Council. (See Appendix V)

FISH DETECTION

The Council urged Member Governments to take note of use and value of advanced sonar scanning techniques for the detection of fish and to consider its application in their own countries.

PURSE SEINING AND PELAGIC FISHERIES

The Council requested FAO to make available to Member Governments information upon the use of lights in purse seining as developed in the Philippines.

MOTORIZATION

The Council requested FAO to assemble and disseminate information on the present situation with respect to fiscal taxes applied to fuel oil, engines, gear and the equipment used by fishing craft throughout the world, to ascertain the extent of systems of tax exemption, rebates or refunds on such supplies as well as details on the procedures and fiscal safeguards applied in such cases. Member Governments should also be requested to supply information regarding the difficulties met with in implementing the Council's earlier recommendation.

STATISTICS

The Council decided not to re-establish the Working Party on Statistics, but urged FAO to provide adequate support for the FAO Regional Fishery Statistician, including provision for necessary travel in the region.

The Council, having noted the substantial and urgent need for improved fishing statistics and data collection in a number of Member Countries, suggested that the terms of reference of the Regional Statistician be broadened so that he might:

A. Work out an approximate program of improvement of fisheries statistics in the region, having regard to the requirements of Member Governments;

B. Formulate, in consultation with Member Governments a uniform framework for fisheries statistics which is likely to be acceptable to the region, taking into account the particular features of the fisheries in the region and bearing in mind definition of survey items and classification which have already been developed by FAO, for consideration at the 13th Session;

C. Facilitate the implementation of the fisheries census proposed by the 11th Session of the Council and report progress to the 13th Session of the Council.

The Council decided to promote the completion of a manual on the unit stock and unit fisheries of the Indo-Pacific area and supplement this by the preparation of a manual for identification of commercially important species. To this end the Council recommended that:

A. This project should be under the direction of a general editor (the Committee proposed the appointment of Mr. W. Lai-Yee Chan of Hong Kong to this position), who should be assisted in this work by the Council Secretariat through whom contact should be provided with FAO, UNESCO and other organizations.

B. The objective of the project should be the preparation of a convenient manual for the use of field staff, statisticians and others and intended to assist in stabilization of the identification of species of aquatic organisms appearing in commercial catches. In format the manual should be a collection of robust cards of convenient size held together in some suitable looseleaf binding.

C. The manual should consist of a card for each of the commercially important aquatic organisms of the region. The criterion of commercial importance of a species in any country should be whether it falls within that group of species whose catches together make 90% of the total catch taken in the country; this criterion applies to Crustacea, Mollusca and other organisms. A list of species meeting this criterion should be prepared for each country; draft lists might be prepared by the IPFC Secretariat from statistical reports and other literature: these draft lists should be sent to the member of Technical Committee I of each country with a request that the list be corrected to conform with the above criterion and that the common names employed in the country for each species be added to the list, in national script as well as in Romanized version. These lists should be combined in systematic order by the general editor. It is assumed that the general editor will

seek from other specialists such assistance as he might need in resolving problems of taxonomic dispute.

D. Each card should carry the following information:

i) scientific name

ii) common names in national languages, preferably the officially adopted names

iii) distinctive features

iv) illustrations

v) geographic distribution, preferably in map form

vi) habitat

vii) methods by which fished

E. Alphabetic indexes of names should be prepared and some items of information might be summarized in tabular form.

F. Printing of the cards should be carried out at one selected printery. Grateful note was taken of an offer of the Research Center for Southeast Asia at the Kyoto University in Japan, and of UNESCO, to assist in this work; and recommended that these be accepted, but the Council considered that Member Governments of IPFC also should contribute to the cost of this project.

G. Each country should receive a complete sets of these cards (each set might consist of 150 to 200 cards in all) to be placed in research laboratories and other institutions; in addition, each country should receive for the use of its field staff and statistical officers sets of the cards relating only to its own species.

FISHERIES COOPERATIVES

The Council drew the attention of FAO and Member Governments to:

i) advantages to be gained from the formation of fishermen's associations as an initial step towards the development of the fisheries

ii) the need to make available training in the management skills needed for the successful formation and operation of fishery cooperatives and associations

iii) the need for FAO to initiate case studies and collect other information on associations and cooperatives for the guidance of Member Governments having an interest in these developments.

RESOURCES APPRAISAL AND THE MANPOWER REQUIREMENTS

The Council took note of the recommendations by the Executive Committee in connection with resources appraisal and of observations on this matter made by the 7th and 8th FAO Regional Conferences. The Council had devoted considerable time to problems concerned with assessments of stocks of commercial species of fish and had confined its discussions to species to which priority could be assigned. In the course of these discussions, the Council had already made various proposals for concerted action to contribute to solution of problems in the exploitation of the stocks. The Symposium on Fisheries Education had reviewed the problem of fisheries training in a general sense and the report of the Symposium led to certain specific recommendations for action by FAO and Member Governments within this sphere.

In considering wider manpower requirements, the Council recognized the need for a wider and integrated training program in the Indo-Pacific region and urged that in the first instance, Member Governments should define to the Council their individual needs for trained personnel and facilities. The Council would recommend, however, that such information should also cover the requirements for the vital field of exploration and experimental fishing which is necessary for the more precise knowledge of the fishery resources of the region.

The Council recommended that immediate steps should be taken by the Member Governments with the assistance of FAO to promote intra-regional development of training in these fields. For example, group participation by personnel of other countries could be arranged in fishery development country projects set up under UNDP, such as the Philippine Deep Sea Fishing Development Project, or in ways similar to those being developed at present cooperatively by Malaysia and Thailand.

IMPROVEMENTS IN FISHING CRAFT DESIGN

Discussion of improved trawlers with modification to permit conversion to purse seining at short notice was of particular interest. In relation to the Philippine developments in purse seining and the possibility of adapting trawlers for seining, it was noted that there is an increasing application for larger trawler-seiners (in length over 90 feet) equipped with modern sonar equipment for fish detection in the IPFC area.

FISH HARBORS

The Council noted that requirements for fish harbors are of greatest concern to those parts of the Indo-Pacific region in which facilities are needed for small fishing boats of limited draft.

FISH CULTURE

The Council took note of the recommendation of the Executive Committee that a subcommittee on fish culture should be established and that one of its primary tasks should be to undertake a study at national level of the economics of fish culture. It was agreed that the economics of fish culture should be studied and that such a study would require the services of biologists as well

as of economists, insofar as it would be concerned with estimates of the economic productivity of fish culture under improved practices.

The Council decided to appoint a Working Party on this subject, to consist of biologists to be designated by the Governments of India, Indonesia, Japan, Malaysia and Philippines, together with fisheries economists to be appointed by FAO, provided FAO intends to take action in this field. In the event that FAO is unable to participate in this operation, the Council requests the biologists concerned to proceed with the study insofar as it falls within their fields of competence.

Recognizing the importance of fish culture in relation to the planning of land utilization and taking into account the multifarious practices adopted in various Member Countries involving great variations in capital investment and return, and also the efforts to introduce improved techniques, it was considered that the inquiry, inter alia should cover:

1) levels of investment in different types of fish culture, with details of the practices employed;

2) investment and return ratio in comparison with agriculture, horticulture, sylviculture, etc.; and

3) current stage of development and future programs of evolving techniques in fish culture with a bearing on better utilization of capital investment.

COASTAL AQUICULTURE

It was agreed that this subject deserved serious attention, but that due to its complexity, preparation for its consideration might involve some time. Accordingly, the Council recommended that "Coastal Aquiculture" be adopted as the subject for the 14th Session. Dr. T. Ino (Japan) was asked to serve as Convenor, and it was agreed that he should be assisted by a Working Party consisting of Dr. A. Sribhibhadh (shrimps; Thailand), Dr. Blanco (seaweeds; Philippines) and a member to be nominated (fish culture; India).

The Party was asked to interpret "coastal culture" in a broad sense. The Symposium should deal with biological, technological and economic aspects of the subject.

SYMPOSIUM FOR THE 13TH SESSION

The Council adopted a proposal for the two Technical Committees that the Symposium for the 13th Session should be "Demersal Fisheries" and requested the Working Party on Trawling to organize this symposium under the convenorship of the Chairman Dr. Arporna Sribhibhadh. It was recommended that the subject matter for the symposium be arranged under the headings:

1. Experimental Fishing
2. Exploratory Fishing
3. Stock Identity and Distribution
4. Stock Assessment.

SEMINAR ON FRESH FISH PRESERVATION

The Council resolved to request FAO to organize a Regional Seminar on Fresh Fish Preservation, with the assistance of UNDP, keeping in view the following considerations:

i) Priority in scheduling the Seminar should be set after review of other items requiring technical assistance funds.

ii) The Seminar should be planned on a regional basis with emphasis on the handling and preservation problems of the species and under the conditions existing in the IPFC countries.

iii) The content of the Seminar should be practical with suitable laboratory and field demonstrations illustrating the practices and problems in specific fisheries of the interested countries.

STRENGTHENING OF FAR EAST REGIONAL OFFICE

The Council considered that the proposal to strengthen the Far East Regional Office by appointment to it of regional specialists in fishing boat construction and in fishing gear should be reviewed in the light of the changed situation of the fishery industries of the region and the altered character of governmental programmes. Various Delegates drew attention to the fact that these changes were such that Member Governments were now in need of specialists in narrow fields instead of in broad subjects. The Council held the view that the role of the Regional Office should be to assist Member Governments, FAO and the Council itself to identify problems and opportunities for action rather than to provide specialists able to assist in solving those problems. The Regional Office should maintain an intelligence service through which it would have a reliable and up-to-date view of the status of the industries in the region and of governmental and other programmes relating to these industries. Through this intelligence service the Regional Office should be in a strong position to advise Member Governments and FAO of opportunities for international aid to national programmes. It should also be in a position to furnish the Council at each session with a reliable survey of fishery matters in the region on which much of the deliberations of the Council could be based. Any strengthening of the Regional Office should be by way of providing personnel able to participate in the operation of such an intelligence service and available for consultation by Member Governments in appraisal of the situation of their industries and their programmes. Careful attention should be given to the methods employed in operating this service and to the equipment required for it. The Council decided to appoint a Sub-Committee of representatives of Member Governments to review the structure and function of the Regional Fisheries Office in the light of the views expressed above.

SUMMARY REVIEW OF THE RESOLUTIONS AND RECOMMENDATIONS ADOPTED BY THE INDO-PACIFIC FISHERIES COUNCIL DURING THE PERIOD 1956-64

The Council noted that in these five sessions it adopted 253 resolutions on 98 of which no action had been taken. Although unable to make a detailed analysis of the origins, intent, and follow-up of each such abortive resolution the Council considered that failure might be due to: (1) inept framing of resolutions, resulting in vagueness as to intention, (2) failure to indicate clearly the courses of action expected, (3) errors in deciding upon to whom each resolution should be directed. It was believed that such errors would often have had their origin in a breakdown of communication as a consequence of which the Delegates at a Council meeting might have found themselves insufficiently informed as to their Government's position on matters before the Council. In other instances, failure might have resulted from insufficiently vigorous follow-up action. The Secretariat was requested to analyze the set of resolutions adopted at a Council meeting and to take appropriate action to secure implementation of each resolution; the Secretariat should be vigilant in eliciting response from those to whom resolutions are addressed.

The Executive Committee was requested to prepare a schedule of the resolutions of the 11th and 12th Sessions on which there has been no action and to draw the attention of Member Governments to the need for action.

Finally the Council recommended that at each Session the Executive Committee should present an analysis of the resolutions of the immediately preceding Session, report the action taken in implementation of each resolution, and in the case of resolutions on which no action had been taken, give where possible an explanation of why no action had been taken; in particular the Executive Committee should draw attention to mistakes on the part of the Council in drawing up its resolutions.

INTERNATIONAL TROPICAL FISH CULTURE RESEARCH

The Council had a full discussion on the question of the setting up of an International Tropical Fish Culture Research Institute in the form of an expansion and internationalization of the existing Institute at Malacca, Malaysia on the basis of a report from its special committee. Most of the Delegates favored the establishment of an International Tropical Fish Culture Institute, and with the exception of Delegates from New Zealand and Japan all Delegates expressed interest in the continued operation of the Institute at Malacca under the terms proposed. Delegates from Australia, India, Korea, Malaysia, Thailand, United Kingdom and United States of America stated that they would be prepared in due course and subject to the success of the project to recommend their Governments should give consideration to providing financial support to the Institute. Only the Delegate of Malaysia was able to say that his Government would be prepared to make a contribution to the costs of operation of the Institute if it were established as proposed.

The United Kingdom Delegate explained that his statement was made in a personal capacity and that his present official instructions were that the United Kingdom Government would be unwilling to make any further contribution after the end of the Special Fund Project.

The Delegate of India said that his recommendation would be subject to the facilities offered by the Institute being considered adequate for an International Training and Research Center by experts and to the Institute's program being relevant to the problems of India.

The Delegate of Ceylon had to emphasize that, even if he should be in the position to make a recommendation, his Government's contribution would be purely nominal.

The Delegates of France, Japan, New Zealand, Philippines, and Vietnam said that their Governments would not be able to make any financial contribution to the costs of operation of the Institute.

A majority of the Delegates considered inland fishery development as of equal or nearly equal importance with marine fishery development, and all thought that international action with regard to inland fisheries was desirable. It was agreed that an International Institute could not only itself be valuable in doing research and training and might also become the focus for activities of national institutions throughout the region. Many Delegates stressed the need for a very careful review of the program that might be assigned to the International Institute, and it was agreed that such a review should take into account the possibility of alternative location. The hope was expressed that the UNDP would agree to the proposal for a preparatory mission and that that mission's terms of reference would allow it to make a comprehensive and thorough review. The Council accordingly decided to support the proposed request to the UNDP as set out in the Appendix to Working Paper 38 in the expectation that only necessary modifications would be introduced into the project as a result of a preparatory mission to be financed by the UNDP.

The Delegate of Malaysia drew the attention of the Council to the fact that the annual cost of running the Institute even at the level now proposed will be of the order of US $400,000. He was particularly concerned that Malaysia should not have to contribute more than she does now to the cost of running such an Institute at the end of the UNSF period. He wished to inform the Council that in view of the lack of evidence of strong financial support for the project from interested member countries, his Government will have to do a re-thinking on the proposal. He requested that these views be recorded in the Minutes.

TIME AND PLACE OF 13th SESSION

There being no invitation offered by any Member Government represented, the Council invoked the provision of Rule II placing responsibility for the selection of the time and place for the next Session on the Chairman, in consultation with the Director-General of FAO and subject to the approval of a majority of Member Governments.

ADOPTION OF SUMMARY REPORT

The Delegate for _____ moved, seconded by the Delegate for _____ that the Summary Report of the Council's 12th Session be adopted. The motion was carried unanimously.

COUNCIL OFFICE BEARERS

Election of the Chairman and Vice.

The Delegate for _____ nominated and the Delegate for _____ seconded, Delegate for _____ as Chairman. The nomination was supported by the Delegate for _____ and _____ was declared elected with acclamation.

The Delegate for _____ nominated and the Delegate for _____ seconded _____, Delegate for _____ as Vice-Chairman. The Delegate for _____ supported the nomination and _____ was declared elected, with acclamation.

Dr. Lee, Bong Nai, retiring Chairman, became Member (ex officio) of the Executive Committee.

TECHNICAL COMMITTEE OFFICE BEARERS

Technical Committee I, for the inter-session period and 13th Session:

Chairman: Dr. Deb Menasveta (Thailand)
Rapporteur: Mr. W. Lai-Yee Chan (Hong Kong)

Technical Committee II, for the inter-session period and 13th Session:

Chairman: Mr. E. P. Ho (Hong Kong)
Rapporteur: Mr. John Dassow (U.S.A.)

FORMAL RESOLUTIONS

The Delegate for _____ moved and the Council adopted the following resolutions:

The Council having convened in Plenary Session desires to place on record its very deep appreciation of the courtesy and generosity of President Lyndon B. Johnson and the Government of the United States of America in extending to it an invitation to hold its 12th Session in Honolulu, Hawaii.

The Delegate for _____ moved and the Council adopted a resolution that the Council express to the Area Director and staff of the Bureau of Commercial Fisheries, Honolulu, a sincere and personal expression of appreciation for the willing and friendly assistance provided by the officers and staff of the Bureau for the day-to-day operations of the Council' session.

The Delegate for _____ moved and the Council adopted a resolution extending to the United States Delegation to the 12th Session of the Council an expression of sincere appreciation for the courtesy and hospitality extended to it during the 12th Session.

The Delegate for _____ moved and the Council adopted a resolution extending to the President of the University of Hawaii an expression of its sincere appreciation for the courtesies and facilities extended to it.

The Delegate for _____ moved and the Council adopted a resolution that the Council extend to the Chancellor and administrative personnel of the East-West Center an expression of sincere appreciation for access to and the use of the magnificent facilities in Jefferson Hall, and particularly for the willing and courteous assistance rendered the Council by personnel of the Center.

The Delegate for _____ moved and the Council adopted a resolution that the Council place on record an expression of warm appreciation for the courtesy, generosity and cooperation shown by the British Council in assembling and forwarding to Honolulu for display during the Council Symposium on Fisheries Education a most interesting and extensive collection of publications relevant to the subject.

APPENDIX 1

LIST OF DELEGATES AND OBSERVERS

GOVERNMENT	NAME	DESIGNATION	ADDRESS
Australia	Dr. G.L. Kesteven (Delegate)	Assistant Chief	CSIRO, Division of Fisheries and Oceanography, P.O. Box 21 Cronulla, N.S.W., Australia
	Dr. A.M. Rapson (Alternate)	Chief, Division of Fisheries	Department of Agriculture, Stock and Fisheries Port Moresby, Papau
	Mr. A.C. Bogg (Alternate)	Director	Dept. of Fisheries and Fauna Conservation Box 901 E Adelaide, South Australia
Ceylon	Mr. L.F. Tissevernsinghe (Delegate)	Assistant Director	Fisheries Department P.O. Box 531 Colombo 3, Ceylon
France	Mr. M. Legand (Delegate)	Chief, Oceanographic Section	Centre O.R.S.T.O.M. B.P. 4, Noumea, New Caledonia
India	Dr. G.N. Mitra (Delegate)	Fisheries Development Adviser to Government of India	Ministry of Food, Agriculture, Community Development and Cooperation, Department of Agriculture, New Delhi, India
	Mr. K.G. Pillai (Adviser)	Managing Director	Kerala Fisheries Corporation, P.B. Box 115, Ernakulam 1, S. India

GOVERNMENT	NAME	DESIGNATION	ADDRESS
Japan	Dr. T. Ino (Delegate)	Senior Research Officer	Research Division, Fisheries Agency, Ministry of Agriculture and Forestry, 2-2 Kasumigaseki, Chiyoda-ku, Tokyo, Japan
	Mr. S. Hamanaka (Alternate)	Consul of Japan	Consulate General of Japan 1742 Nuuanu Avenue Honolulu, Hawaii
Korea	Mr. Lee, Bong Nai (Delegate)	Director	Central Fisheries Inspection Station, 103 Won Nam Dong, Chongro-ku, Seoul, Korea
	Mr. Koh, Dong Jae (Alternate)	Chief, First Fishing [redacted] Section	Office of Fisheries Seoul, Korea
Malaysia	Mr. Soong, Min Kong (Delegate)	Director of Fisheries	Ministry of Agriculture and Co-operatives Jalan Swettenham, Kuala Lumpur, West Malaysia
	Mr. D. Pathansali (Alternate)	Acting Senior Research Officer	Fisheries Research Institute Glugor, Penang, West Malaysia
	Mr. Chin, Phui Kong (Adviser)	Fisheries Officer	Fisheries Branch Department of Agriculture P. O. Box 1064 Jesselton, Sabah, East Malaysia
New Zealand	Mr. A. C. Kaberry (Delegate)	Director	Fisheries Division Marine Department Wellington, New Zealand

GOVERNMENT	NAME	DESIGNATION	ADDRESS
Philippines	Mr. S. B. Rasalan (Delegate)	Acting Deputy Commissioner and Officer-in-charge	Philippine Fisheries Commission, Intramuros, P. O. Box 623, Manila, Philippines
	Professor A. S. Timbol (Adviser)	Assistant Professor of Fisheries	College of Fisheries Mindanao State University Philippines
Thailand	Mr. P. Karnasut (Delegate)	Director-General	Department of Fisheries, Ministry of Agriculture, Rajadamnern Avenue, Bangkok, Thailand
	Dr. D. Menasveta (Alternate)	Fisheries Biologist	Investigation & Research Division, Department of Fisheries, Ministry of Agriculture, Rajadamnern Avenue, Bangkok, Thailand
	Dr. A. Sribhibhadh (Adviser)	Fisheries Biologist	Investigation & Research Division, Department of Fisheries, Ministry of Agriculture, Rajadamnern Avenue, Bangkok, Thailand
	Mr. J. Thammedh (Adviser)	[redacted]-Dean	Head, Department of Agriculture, College of Fisheries, Kasetsart University, Bangkok Thailand
U. K.	Dr. D. N. F. Hall (Delegate)	Fisheries Advisor	Ministry of Overseas Development, Eland House, Stag Place, London S. W. 1, U. K.
	Mr. W. Wenban-Smith (Alternate)	First Secretary	British High Commission, Police Cooperative Bld. 1 Jalan Suleiman P. O. Box 1030 Kuala Lumpur, Western Malaysia
	Dr. G. A. Prowse (Adviser)	Director	Tropical Fish Culture Research Institute Batu Berendam Malacca, Western Malaysia

GOVERNMENT	NAME	DESIGNATION	ADDRESS
(for Hong Kong)	Mr. E. P. Ho (Adviser)	Assistant Director Fisheries	Agriculture & Fisheries Department, Cambridge Court, 84 Waterloo Road Kowloon, Hong Kong
	Mr. W. Lai-Yee Chan (Adviser)	Acting Senior Research Officer	Fisheries Research Station, Shek Pai Wan Road, Aberdeen, Hong Ko
(for Fiji)	Mr. L. C. Devambez (Adviser)	Fisheries	Fiji
U.S.A.	Mr. J. C. Marr (Delegate)	Area Director	U. S. Bureau of Commerc Fisheries, P. O. Box 38 Honolulu, Hawaii 96813
	Mr. J. A. Dassow (Alternate)	Research Chemist	U. S. Bureau of Commerc Fisheries, 2725 Montlak Boulevard, Seattle, Washington 98102, U. S.
	Mr. R. S. Shomura (Adviser)	Acting Deputy Area Director	U. S. Bureau of Commerc Fisheries, P. O. Box 38 Honolulu, Hawaii 96813
	Mr. R. C. Wilson (Adviser)	Acting Chief	Branch of Technical Assistance, U. S. Burea of Commercial Fisheries Washington, D. C. 2024(
	Mr. W. W. Sabbagh (Secretary)	Conference Administrative Officer	Office of International Conferences, Department of State, Washington, D. C. 20520, U. S. A.
Vietnam	Mr. Cao Thien Buu (Delegate)	Deputy Director of Fisheries	Directorate of Fisheries P. O. Box 340 Saigon, Vietnam
	Mr. Tran Van Tri (Alternate)	Chief Marine Fisheries	Directorate of Fisheries P. O. Box 340 Saigon, Vietnam

NON-MEMBER GOVERNMENTS	NAME	DESIGNATION	ADDRESS
Brunei	Dr. E. Birkenmeier (Observer)	State Fisheries Officer	Commission of Development's Office Brunei
Canada	Mr. W. F. Hampton (Observer)	President	College of Fisheries, Navigation, Marine Engineering & Electronics, St. John's Newfoundland, Canada

OBSERVER ORGANIZATION	NAME	DESIGNATION	ADDRESS
P.S.A.	Dr. T. Ino (Observer)	Senior Research Officer	Research Division Fisheries Agency - Ministry of Agriculture and Fishing, 2-2 Kasumigaseki Chiyoda-ku, Tokyo, Japan
S.P.C.	Mr. M. Legand (Observer)	Chief Oceano-graphic Section	Centre O.R.S.T.O.M. B.P. 4, Noumea, New Caledonia
UNESCO	Dr. R. Serene (Observer)	UNESCO Regional Taxonomic Expert South East Asia	c/o National Museum Stamford Road Singapore 6

VISITORS

NAME	DESIGNATION	ADDRESS
Dr. R. A. Barkley	Chief, Oceanography Program	U.S. Bureau of Commercial Fisheries, P.O. Box 3830 Honolulu, Hawaii 96813
Mr. K. Ego	Chief, Fisheries Branch	Division of Fish & Game, 400 So. Beretania Street Honolulu, Hawaii 96813
Dr. J. N. Ellis	Director, Fish Culture Research	The Oceanic Institute Makapuu Point, Waimanalo, Hawaii 96795
Dr. K. Fujino	Chief, Subpopulations Program	U.S. Bureau of Commercial Fisheries, P.O. Box 3830 Honolulu, Hawaii 96813
Mr. F. N. Goto	Manager	United Fishing Agency, Ltd 218 No. Nimitz Highway Honolulu, Hawaii 96817
Mr. H. D. Hart	Vice President	Bumble Bee Seafoods, Inc. P.O. Box 238, Honolulu, Hawaii 96813
Mr. G. S. Hashimoto	President	Tuna Boat Owners Associati 2455 Huene Street, Honolu Hawaii 96817
Mr. J. R. Holloway, Sr.	Supervisor	Division of Fisheries Department of Agriculture Government of American Samoa, Pago Pago, America Samoa
Mr. Robert T.B. Iverson	Fishery Research Biologist	U.S. Bureau of Commercial Fisheries, P.O. Box 3830 Honolulu, Hawaii 96813
Mr. W. A. Kanakanui	Manager	Tuna Boat Owners Associat P.O. Box 238, Honolulu Hawaii 96813

NAME	DESIGNATION	ADDRESS
Mr. T. R. Kendall	Oceanographer	Undersea Engineering & Construction Co., 1110 University Ave., Honolulu Hawaii
Dr. J. J. Magnuson	Chief, Behavior-Physiology Program	U. S. Bureau of Commercial Fisheries, P.O. Box 3830 Honolulu, Hawaii 96813
Mr. B. Muir	Prof. Biology	University of Hawaii Honolulu, Hawaii
Dr. G. I. Murphy	Professor	Department of Oceanography University of Hawaii Honolulu, Hawaii 96822
Mrs. Nam Hai	Fishery Biologist	1256 Lauhala Street Honolulu, Hawaii 96813
Mr. K. Okada	President	U. Okada & Co., Ltd. 1000 So. Queen Street Honolulu, Hawaii 96814
Mr. A. Otani	Manager	M. Otani Co., Ltd. 218 No. Nimitz Highway Honolulu, Hawaii 96817
Mr. T. Otsu	Chief, Albacore Ecology Program	U. S. Bureau of Commercial Fisheries, P.O. Box 3830 Honolulu, Hawaii 96813
Dr. B. J. Rothschild	Chief, Skipjack-Yellowfin Ecology Program	U. S. Bureau of Commercial Fisheries, P.O. Box 3830 Honolulu, Hawaii 96813
Mr. G. R. Seckel	Chief, Trade Wind Zone Oceanography Program	U. S. Bureau of Commercial Fisheries, P.O. Box 3830 Honolulu, Hawaii 96813
Dr. D. W. Strasburg	Chief, Research Submarine Program	U. S. Bureau of Commercial Fisheries, P.O. Box 3830 Honolulu, Hawaii 96813
Mr. M. Takata	Director	Division of Fish and Game 400 S. Beretania Street Honolulu, Hawaii 96813
Dr. A. L. Tester	Professor	Department of Zoology University of Hawaii Honolulu, Hawaii 96822
Mr. DeWitt Gilbert	Press	Pacific Fisherman 71 Columbia St. Seattle Wash

NAME	DESIGNATION	ADDRESS
Dr. R. Van Cleve	Dean, University of Washington	College of Fisheries University of Washington Seattle, Washington 98105
Mr. J. S. Campbell	Secretary	Fishing Industry Board New Zealand
Dean J. W. Cobble	Dean and Director	College of Agriculture University of Rhode Island Kingston, Rhode Island U.S.A.

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Mr. F. E. Popper	Director of Program Coordination and Operations	Department of Fisheries FAO of the United Nations Via delle Terme di Caracall Rome, Italy
Mr. H. A. Vogel	FAO North American Representative	FAO North American Regional Office, 1325 C Street Southwest, Washington, D.C.
Mr. H. Kristjonsson	Chief, Gear Technology Section	Fisheries Resources & Exploitation Division, Department of Fisheries FAO of the United Nations Via delle Terme di Caracall Rome, Italy

IPFC SECRETARIAT

Mr. J. A. Tubb	Secretary of IPFC	Regional Fisheries Officer FAO Regional Office for As and the Far East, Maliwan Mansion, Phra Atit Road, Bangkok, Thailand
Dr. T.V.R. Pillay	Technical Secretary IPFC Technical Committee I	Chief, Fish Culture Section Inland Fisheries Branch Department of Fisheries FAO of the United Nations Via delle Terme di Caracall Rome, Italy

NAME	DESIGNATION	ADDRESS
Dr. G.N. Subba Rao	Technical Secretary IPFC Technical Committee II	Fisheries Officer FAO Regional Office for Asia and the Far East, Phra Atit Road, Bangkok, Thailand
Mr. E. S. Holliman	Technical Secretary IPFC Technical Committee II	Chief, Fishery Economics & Development Branch Department of Fisheries, FAO of the United Nations, Rome, Italy
Dr. T. Yamamoto	Technical Secretary IPFC Working Party on Statistics	Regional Fisheries Statistician, FAO Regional Office for Asia and the Far East, Phra Atit Road, Bangkok, Thailand
Mrs. A. Soulier	Conference Officer	Technical Assistant (Fisheries), FAO Regional Office for Asia and the Far East, Phra Atit Road Bangkok, Thailand
Miss M. T. Iordanow	Interpreter	Via del Plebiscito 112 Rome, Italy
Miss C. Corajoud	Interpreter	15 rue de Remusat Paris 16°, France
Mr. J. Sala	Interpreter	16 rue de Corneille Declercq Brussels 9, Belgium
Mr. G. Kaminker	Interpreter	1924 Bryant Place, Baldwin Long Island, New York, New York 11512 U.S.A.

IPFC - ARRANGEMENTS COMMITTEE

Mr. R.T.B. Iversen	Fishery Biologist	U.S. Bureau of Commercial Fisheries, P.O. Box 3830 Honolulu, Hawaii 96813 U.S.A.
Mr. E. C. Jones	Fishery Biologist	U.S. Bureau of Commercial Fisheries, P.O. Box 3830 Honolulu, Hawaii 96813 U.S.A.

NAME	DESIGNATION	ADDRESS
Mr. E. Lee	Assistant Area Director for Administration	U.S. Bureau of Commercial Fisheries, P.O. Box 3830 Honolulu, Hawaii 96813 U.S.A.
Mr. T. A. Manar	Chief, Publication Services	U.S. Bureau of Commercial Fisheries, P.O. Box 3830 Honolulu, Hawaii 96813 U.S.A.
Mrs. H. Nishimura	Librarian	U. S. Bureau of Commercia Fisheries, P.O. Box 3830 Honolulu, Hawaii 96813 U.S.A.
Mr. W. T. Tanaka	Marine Superintendent	U.S. Bureau of Commercial Fisheries, P.O. Box 3830 Honolulu, Hawaii 96813 U.S.A.

APPENDIX II

NOMINATIONS FOR PERIOD BETWEEN 12TH AND 13TH SESSIONS (1966-1967)

TO IPFC

* Note: Where fresh nominations have not been received, those for the period between 11th and 12th Sessions have been carried over.

Member Governments	Administrative Correspondent	Technical Committee I	Technical Committee II
AUSTRALIA	Assistant Secretary (Fisheries) Department of Primary Industry Canberra, Australia	Dr. G.L. Kesteven, Asst. Chief CSIRO Division of Fisheries & Oceanography, P.O. Box 21, Cronulla, N.S.W., Australia	Mr. C.G. Setter, Asst. Secretary (Fisheries) Department of Primary Industry, Canberra, A.C.T., Australia Dr. J.R. Vickery, Division of Food Preservation and Transport, CSIRO, Homebush, N.S.W., Australia
BURMA	(2) The Secretary, * Ministry of Agriculture and Forest, Rangoon, Union of Burma	_____ *	_____ *
CAMBODIA	Mr. Sao Leang, Directeur * du Service des Peches, Direction des Peches, B.P. 46, Phnom-Penh Cambodia	_____ * (Copy for information to Mr. Sao Leang)	_____ * (Copy for information to Mr. Sao Leang)

Member Governments	Administrative Correspondent	Technical Committee I	Technical Committee I
CEYLON	(2) Director of Fisheries P.O. Box 531, Colombo-3 Ceylon.	Dr. T.T. Goonawardne Research Officer, Department of Fisheries, P.O. Box 531, Colombo-3 Ceylon.	Mr. G.F.P. Vitharne, General Manager, Ceylon Fisheries corporation Colombo, Ceylon.
FRANCE	Direction des Pêches Maritimes du Secrétariat d'Etat a la Marine Marchande, Paris, France.	Monsieur M. Legand, Chef de la Section d'Océanographie de l'Institut Francais d'Océanie, B.P. No4, Noumea, New Caledonia.	Monsieur M. Grandperrin, Océanographe biologiste, Section d'Océanographie de l'Institut Français d'Océanie, B.P. No 4 Noumea, New Caledonia.
INDIA	Dr. G.N. Mitra, Fisheries Development Adviser, Ministry of Food, Agriculture, Community Development and Co-operation, New Delhi, India.	Mr. K. Chidambaram Deputy Fisheries Development Adviser, Ministry of Food, Agriculture, Community Development and Co-operation, New Delhi, India.	Dr. A.N. Bose, Director Central Institute of Fisheries, Technology, Ernakulam, Cochin, India.
INDONESIA	Administrative Correspondent, c/o Mr. H. Saanin, Adviser of Minister of Fisheries, 16 Salemba Raya, Djakarta, Indonesia.	* Copy for information Administrative Correspondent c/o Mr. H. Saanin, Adviser of Minister of Fisheries, 16 Salemba Raya Djakarta, Indonesia.	* Copy for information Administrative Correspondent, c/o Mr. H. Saanin, Adviser of Minister of Fisheries, 16 Salemba Ray Djakarta, Indonesia.
JAPAN	Mr. Keizo Kimura, Chief * Specialized Agencies U.N. Bureau, Ministry of Foreign Affairs, 2-2 Kasumigaseki, Chiyoda-ku Tokyo, Japan.	Dr. T. Ino Senior Research Officer, Research Division, Fisheries Agency, Ministry Agriculture & Forestry, 2-2 Kasumigaseki, Chiyoda-ku, Tokyo, Japan.	Mr. T. Nakamura Chief Fisheries Statistic Section Statistics and Survey Div Ministry of Agriculture and Forestry 2-2 Kasumigaseki Chiyoda-ku, Tokyo, Japan

Member Governments	Administrative Correspondent	Technical Committee I	Technical Committee II
KOREA	Mr. Myong Nam Ahn Planning Coordinator Office of Fisheries Seoul, Korea	Mr. Koh Dong Jae Chief, First Fishing [redacted] Section, Office of Fisheries, Seoul, Korea	Mr. Shin Kwang Yun, Chief Deep Sea Fishing Section, Office of Fisheries, Seoul, Korea
MALAYSIA	Radin Soenarno Al-Haj Bin Radin Soenariyo Principal Assistant Secretary Ministry of Agriculture and Co-operatives Malaysia, Kuala Lumpur	Mr. Soong Min Kong Director of Fisheries Fisheries Division Ministry of Agriculture and Co-operatives Malaysia, Kuala Lumpur	Mr. Soong Min Kong Director of Fisheries Fisheries Division Ministry of Agriculture and Co-operatives Malaysia, Kuala Lumpur
NETHERLANDS	Miss P.F.M.van der Togt Liaison Officer for FAO Affairs, Ministry of Agriculture and Fisheries 1st van den Boschstraat 4, The Hague, Netherlands	Dr. J. J. Schuurman Reader on Pisciculture at Agricultural University Van Iddekingeweg 56 Groningen, Netherlands	Mr. J. G. de Wit Head, Technical Research Branch Fisheries Division Havenkade 19 Ijmuiden, Netherlands
NEW ZEALAND	Mr. A. C. Kaberry Director, Fisheries Division, Marine Dept. Wellington, New Zealand	Mr. A. C. Kaberry Director, Fisheries Division, Marine Dept. Wellington, New Zealand	Director, Fisheries Division, Marine Dept. Wellington, New Zealand
PAKISTAN (For West and East)	Dr. M. R. Qureshi * Director, Marine Fisheries Department, Fish Harbour, Karachi-2, West Pakistan	Dr. Nazir Ahmad, Director* of Fisheries, West Pakistan Govt., 2 Sauda Rd. Lahore, West Pakistan Mr. Munirul Islam, Deputy Director, Marine Fisheries Department, Chittagong, East Pakistan	Dr. M. R. Qureshi * Director, Marine Fisheries Department, Fish Harbour, Karachi-2, West Pakistan
PHILIPPINES	Dr. Herminio R. Rabanal, Acting Chief, Freshwater Fisheries Division, Philippine Fisheries Commission, P.O. Box 623 Intramuros, Manila Philippines	Mrs. Pricilla Caces-Borja Supervising Fishery Biologist Philippine Fisheries Commission, P.O. Box 623 Intramuros, Manila Philippines	Dr. S. V. Bersamin Philippine Fisheries Commission, P.O. Box 623 Intramuros, Manila, Philippines

Member Governments	Administrative Correspondent	Technical Committee I	Technical Committee II
THAILAND	Mr. Andhi P. Isarankura Fisheries Technical Officer, Dept. of Fisheries, Ministry of Agriculture Rajadamnern Avenue Bangkok, Thailand	Dr. Deb Menasveta Fisheries Technical Officer, Dept. of Fisheries, Ministry of Agriculture Rajadamnern Avenue Bangkok, Thailand	Mr. Sant Bandhukul Deputy Director-General Dept. of Fisheries Ministry of Agriculture Rajadamnern Avenue Bangkok, Thailand
U.K. (for Hong Kong)	Mr. E. P. Ho Assistant Director (Fisheries), Cambridge Court, 84 Waterloo Road Second Floor Kowloon, Hong Kong	Mr. W. Lai-Yee Chan Senior Research Officer Fisheries Research Station, Shek Pai Wan Road, Aberdeen, Hong Kong	Mr. E. P. Ho Assistant Director (Fisheries), Cambridge Court, 84 Waterloo Road Second Floor Kowloon, Hong Kong
(for London)(10)	U.K. Liaison Officer * British Embassy Bangkok, Thailand		
U.S.A.	_____#	Mr. J.C. Marr Area Director U.S.Bureau of Commercial Fisheries P.O. Box 3830 Honolulu, Hawaii 96812 U.S.A.	Mr. J.A. Dassow Supervisory Research Chemist, U.S. Bureau of Commercial Fisheries 6116 Arcade Building Seattle, Washington 98101 U.S.A.
VIETNAM	Monsieur le Ministre de l'Agriculture 59, Nguyen-binh-Khiem, Saigon	Mr. Le-van-Dang Chef du Service des Pêches Continentales P. O. Box 340 Saigon	Mr. Tran-van Tri Chef du Service des Pêches Maritimes P.O. Box 340 Saigon

#No Administrative Correspondent has been designated but copies of correspondence, etc., relating to policy and operations should go to:

(1) Dr. R.W. Phillips, Director of International Organization Staff, Office of Assistant Secretary for International Affairs, Foreign Agriculture Service, Department of Agriculture, Washington, D.C., 20250, U.S.A.

(1) Agricultural Attache, American Embassy, Bangkok, Thailand.

(1) Mr. H.G. Ainsworth, Counselor of Embassy for Economic Affairs, Liaison Officer, U.S. Embassy, Rome, Italy.

(12) Mr. H.A. Vogel, Regional Representative, FAO Regional Office for North America, 1325 C Street, S.W., Washington, D.C., 20225, U.S.A.

(Reference FAO Manual, Chapter VI, Section 615)

APPENDIX III

JOINT IPFC/IOC MEETING
PARTICIPANTS

12th Session, IPFC, Honolulu, Hawaii 3-17 October 1966

Dr. G.L. Kesteven	Australia
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Mr. Tong Je Koh	Korea
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Mr. S.B. Rasalan	Philippines
Mr. A.S. Timbol	Philippines
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Mr W. Lai-Yee Chan	Hong Kong
Mr. L.C. Devambez	Fiji
Mr. J.C. Marr	USA
Mr. R.S. Shomura	USA
Mr. Tran Van Tri	Vietnam
Mr. Cao Thien Buu	Vietnam
Dr. E. Birkenmeier	Brunei
Dr. R. Serene	UNESCO
Dr. T.V.R. Pillay	FAO

LIST OF DOCUMENTS

WORKING PAPERS:

IPFC/C66/WP	1	Provisional Agenda
	1(Fr)	Ordre du jour provisoire
	2	Report of the Executive Committee
	3	Status of the Industry
	4	Summary of Resolutions and Recommendations
	5	Unit stocks of shrimps and prawns in the IPFC Region and Unit Fisheries exploiting them
	6	Unit Fisheries of Japan
	7	The Tropical Fish Culture Research Institute, Batu Berendum, Malacca, Malaysia
	8	Intersession Report (1965-66) of Technical Committee II (Technology)
	8(Add.1)	Addendum to Intersession Report (1965-66) of Technical Committee II (Technology) - Japan, Australia.
	9	Report of the 1st Meeting of the Working Party on Fresh (Wet) Fish Preservation, Bangkok, Thailand, 5-8 July 1966
	10	Reports of IPFC Observers to International Meetings, February 1965 - June 1966
	11	Report of the IPFC Working Party on Trawling, Bangkok, Thailand, 27-30 June 1966

IPFC/C66/WP 12 Technical Committee II (Technology)
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13 The possible scope of the Fisheries Census suggested by the Eleventh Session of IPFC
Formation of a Frame for the Fisheries Census

14 Fisheries Statistics in the Countries in Asia and the Far East.

15 Unit Fisheries of Thailand (Marine)

16 Preparation of illustration of the commercially important animals in Asia and the Far East

17 Approximate inventory of trawlers in the Indo-Pacific Area

18 Intersession Report (1964-66) of Technical Committee I (submitted to the 12th Session of the Indo-Pacific Fisheries Council)

18(Add. 1) Research Project Summaries: Thailand (Marine and Freshwater Projects)

18(Add. 2) Addendum to Intersession Report (1964-66) of Technical Committee I - Australia

19 Studies on Tuna Taxonomy

20 11th Pacific Science Congress, Tokyo, August-September, 1966. Resolution of Interest to the Indo-Pacific Fisheries Council

21 Report of the Working Party on Tuna

22 Craft and Gear Development

23 Background notes for Spanish mackerel, (Scomberomorus spp.) from Thai waters, Studies 1954-1965

24 Improvement of Coastal Fishing Boats of Thailand

25 Promotion of Research in Fish Processing

26 Trawl Catch Summarization Program. FORTRAN IV

27 Technical Committee I. Provisional Agenda

27(Add. 1) Technical Committee I Agenda

28 FAO Committee on Fisheries Working Party on Rational Utilization of the Fishery Resources of the Indian Ocean.

IPFC/C66/WP	29	Introduction of Aquatic Animals into Hawaii
	30	Eighth FAO Regional Conference for Asia and the Far East
	31	Technical Committee II - Publication of Technical Papers
	32	Technical Committee II - Program of work for the Intersession Period Between 1966-68
	33	Proposals for the Amendment of IPFC Rules of Procedure (Submitted by the Government of Australia)
	34	Technical Committee I - Papers relating to Agenda Items
	35	Rational Utilization of the Fishery Resources of the Indian Ocean
	36	Communications with Member Governments
	37	Nominations for period between 12th and 13th Sessions 1966-1967 to IPFC.
	38	Report of Special Committee on the Tropical Fish Culture Research Institute Malacca
	39	Terms of Reference of Technical Committees
	40	Report of the Working Party on Rastrelliger
	41	Technical Committee II: Session Report Part 2
	42	Technical Committee II: Report No. 3
	43	Technical Committee II: Report No. 1
	44	Symposium on Fisheries Education
	45	Secretary's Report on Credentials
	46	Technical Committee I: Session Report
	46(Add.1)	Technical Committee I: Session Report
	47	Notes on the Development of a Practical Mass Culturing Technique of the Giant Prawn Macrobrachium rosenbergi
	48	Working Party Report on Summary Review of the Resolution and Recommendations Adopted by the Indo-Pacific Fisheries Council during the Period 1956-64
	49	Technical Committee II: Session Report

INCIDENTAL PAPERS:

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	1(Rev.1) 1(Fr) (Rev.1)	Provisional Programme Programme Provisoire
	2	Provisional List of Delegates and Observers
	3	Provisional List of Documents
	4	Bus Schedules
	5	Order of the Day. Monday, 3rd October
	6	Mailing of Documents
	7	Order of the Day. Tuesday, 4th October, 1966
	8	Order of the Day. Wednesday, 5th October, 1966 Thursday, 6th, October, 1966
	9	Return Travel
	10	Technical Committee I - Program
	11	Order of the Day. Friday. 7th October, 1966
	12	Opening Statements
	13	Order of the Day, Saturday. 8th October, 1966
	14	Order of the Day, Monday. 10th October, 1966
	15	Order of the Day, Tuesday. 11th October, 1966
	16	Order of the Day, Wednesday. 12th October, 1966
	17	Order of the Day, Thursday. 13th October, 1966
	18	Order of the Day, Friday. 14th October, 1966

ECHNICAL PAPERS:

			Subject
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	2	On the Possibilities for further Development of the South East Asian Fisheries until the year 2000. by K. Tiews	Fisheries Development
	3	Preliminary studies on the keeping quality of fish sausage. by S.V. Bersamin and N.G. Macalincag	Food Technology
	4	Preliminary studies on Temperate Assessment of Fish at all stages in the distribution chain. by S.V. Bersamin and E.P. Tongco	Food Technology
	5	The artificial inducement of spawning in the Grass Carp, Ctenopharyngodon idella Val. by C.F. Hickling	Fish Culture
	6	Preliminary review of the more important fisheries of the Western South Pacific and the Eastern South Indian Ocean. by B.B. Jones	Resources
	7	Preliminary results of trawling investigations off Penang. by D. Pathansali, K.S. Ong, S.S. Latiff and J.L. Carvalho	Exploratory Fishing
	8	Protein substitutes for animal feeds from seaweed. by S.V. Bersamin, R.B. Banania and R. Rustia	Seaweeds
	9	Studies on the possible sources of microbial contamination of processed fishery products. by T.S.G. Iyer, D.R. Choudhuri and V.K. Pillai	Food Technology
	10	A Note on the possibilities on manufacture of Bombay paste. by P. Vasudeva Prabhu and R. Venkataraman	Food Technology

			Subject
IPFC/C66/TECH	11	Ice Storage Studies on Indian Pomfrets. by R. Venkataraman, P. Vasudeva Prabhu and D.J. Mankad	Food Technology
	12	Studies on 'Doma' - Quality of the Doma meal from fresh fish to that of room temperature spoiled ones. by D. Ramananda Rao	Food Technology
	13	Belly Depth Studies for Shrimp Trawls. by H.N. Mhalathkar and H. Krishna Iyer	Fishing Gear
	14	Utilization of Sardine Oil for the Industrial purposes - Part I - Factice for use as a filler in rubber compounding. by M.N.N. Kaimal and P. Madhvan	Food Technology
	15	Observations on the Gonad Maturity Stages of Female Rastrelliger kanagurta Cuvier. by D. Pathansali	Marine Biology
	16	A note on a species of Pneumatophorus Jordan and Starks, found in Malaysian waters and the problem raised. by D. Pathansali	Marine Biology
	17	Etude des "Trey Plathou Chamhoy" (les Poissons Bouillis). by Suon Saroeung	Food Technology
	18	An assessment of marine prawn fishery resources of Kanyakumari District South West Coast of India. by M.J. George and K.H. Mohamed	Resources
	19	Fluctuations in the prawn landings in Chilka Lake. by M. Subrahmanyam	Resources
	20	Observations on efficacy of Grass Carp, Ctenopharyngodon idella (Val.) in controlling and utilizing aquatic weeds in ponds in India. by S.B. Singh, K.K. Sukumaran, K.K. Pillai and P.C. Chakrabarti	Fish Culture
	21	On the induced spawning of Pla Sawai, Pangasius sutchi. by S.W. Ling, A. Sithimunka and S. Pinyoying	Fish Culture

			Subject
IPFC/C66/TECH	22	Distribution and migration of albacore (Thannus alalunga) in the Pacific Ocean. by T. Otsu and H.O. Yoshida	Marine Biology
	23	Distribution of juveniles of four species of tunas in the Pacific Ocean. by B.E. Higgins	Marine Biology
	24	Notes on the maturation of tunas in the Indian Ocean. by S. Kikawa and M.G. Ferraro	Marine Biology
	25	Pelagic fishes caught on R/V Anton Brunn cruises 2 and 5 (International Indian Ocean Expedition). by R.S. Shomura	Exploratory Fishing
	26	A continuous-transmission, frequency-moderlated sonar for the study of pelagic fish. by H.S.H. Yuen	Fishing Gear
	27	Gillraker analysis of the Indo -Pacific chub mackerel, Rastrelliger Neglectus (van Kampen) by V. Hongskul	Marine Biology
	28	A Report on Handling and Marketing of Fish in Pakistan. by S.A. Jaleel and S.A. Kabir	Food Technology
	29	A Report on the Collection and compilation of Fisheries Statistics of Pakistan. by S.A. Jaleel and S.M.A. Salam Kazmi	Statistics
	30	Socio-economic activities for the uplift of Fishermen's Community of Pakistan. by S.A. Jaleel and S.M.A. Salam Kazmi	Socio-economics
	31	Estimates of the growth of skipjack tuna (Katsuwonus pelamis) in the Hawaiian Islands. by B.J. Rothschild	Marine Biology
	32	Outline for the initial development of fish culture in ponds in emerging countries. by J.J. Schuurman	Fish Culture

			Subject
IPFC/C66/TECH	33	**A preliminary Report on the Commercial Sea Fisheries of the Western Sector of the IPFC.** **by S. Jones**	**Resources**
	34	Demersal Fish Resources Investigations in the Gulf of Thailand. by I.P. Isarankura and Dr. G. Kuhlmorgen - Hille	Resources
	35	An account of the recent researches carried out at the Fishery Technology Laboratory, Bangkok, Thailand. by Miss B. Kasemsarn, M. Kasemsapand, Miss S. Punjamapirom	Food Technology
	36	Study on the Fecundity of the Indo-Pacific mackerel, Rastrelliger spp. in the Gulf of Thailand. by U. Boonprakob	Marine Biology
	37	Studies on the artificial culture of Penaeus Orientalis Kishinouye by Kim, Kuwon Doo	Fish Culture
	38	Preliminary Report of Freeze Drying Study. by G. M. Nixon	Food Technology
	39	Status of Trawling Data in the Philippines by P. Caces-Borja	Exploratory Fishing
	40	An evaluation of the Fishery Resources of Laguna de Bay by M. N. Delmendo	Resources

YMPOSIUM PAPERS: "Fisheries Education"

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1 The Fishery Schools of Taiwan.
by Liu, Fah Hsuen

2 The Training of Fisheries Administrative Officers in South East Asia.
by Tham Ah Kow

3 Fisheries Extension Service in Japan.
by the Technological Research Section, Fisheries Agency, Japan (Translated by Y. Miyake)

4 Fisheries Education in Taiwan.
by T.P. Chen

5 The Training of Fisheries Extension Staff.
by L.C. Devambez

6 Fisheries Education in the Philippines - University level.
by A.S. Timbol and N.A. Pidlaoan

7 Fishermen's Education in Hokkaido.
by K. Oshima

8 History of Misaki International Fisheries Training Centre.
by Overseas Technical Cooperation Agency, Tokyo, Japan

9 Fishery Education in Senior High Schools.
by S. Danno

10 Fishery Education in Universities.
by the Fisheries Agency, Tokyo, Japan

11 Education of the Fishermen's Cooperative Association School.
by Y. Murakami

12 Training of Fishermen.
by Fisheries Agency, Tokyo, Japan

13 An extension program in the Western Australian Crayfishery.
by H.S. Hawkins and R.R. Ingpen

14 History of Fisheries Education in Japan.
by N. Fujinami

15 Fisheries Education in Japan.
by N. Fujinami

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16 Fisheries Training Courses in Australia.
by C.A. Mobbs

17 Compiling a Fisheries Officers' Field Handbook.
by P.C. Pownall

18 The Training of Fishermen in Hong Kong.
by The Agriculture & Fisheries Department, Hong Kong

19 The Hawaiian Training Program for Trust Territory Fishermen.
by T.S. Hida

20 Audiovisual Aids in Adult Education.
by H. Philp

21 The Making and Training of Fishermen in Isreal.
by R. Ruppin

22 Training program for skipjack tuna fishermen in Hawaii.
by T.S. Hida

23 Fisheries Training in the United Kingdom for overseas posts.
by C.F. Hickling

24 The Selection and Training of Instructors.
by G.J. Hall

25 Teaching Fish Technology - Organization of Training Courses in Fish Handling and Processing.
by J.J. Waterman

26 Syllabus for post graduate students and Departmental Officers at Fisheries Training Institute, Kakinada. 2, Andhra Pradesh India.

27 The Development of Fisheries Training in the United Kingdom.
by D.N.F. Hall

28 How to develop latent fishing skills for Today's Industries.
by A.M. Rapson

29 Fisheries Education and Training in growth and development programs.
by G.M. Gerhardsen

30 General considerations in manpower planning and their application to drawing up fisheries development programs.
by R. Hamtisch

31 Fisheries Education at the University level in Thailand, its background, development and problems.
by J. Thiemmedh

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32 Activities of FAO Working Party on Direct and speedier estimation of fish abundance with special reference to instruction and training in techniques.
by B.B. Parrish

33 Current American Literature in the Marine Sciences.
by Hazel S. Nishimura

34 A two-year associate degree in commercial fisheries at the University of Rhode Island.
by J.W. Cobble, A. Holmsen and D.F. Shontz

35 Central Institute of Fisheries Operatives Ernakulam, India.
by its staff

36 Fisheries Education in Pakistan
by M. R. Qureshi

37 Fishery Training in New Zealand
by A. C. Kaberry

38 Recent Accounts of Fisheries Education in Thailand
by Prida Karnasut, Arporna Sribhibhadh, Deb Menasveta, and Andhi P. Isarankura

39 Symposium on Fisheries Education

40 Types of Occupations in Different Fisheries in Japan

41 Marine Fisheries Schools - Malaysia Information and Summarized Curriculum

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JOINT IPFC/IOC MEETING ON FISHERY ASPECTS OF CSK

IPFC/IOC/66/A		Provisional Programme
	B	Provisional Agenda

IPFC/IOC/66/WP	1	Report of the CSK Assistant International Coordinator for Fisheries to the Third Meeting, CSK Coordinating Group Tokyo, 18-20 August 1966.
	2	Recommendations approved by the Third Meeting of the International Coordinating Group for the Cooperative Study of the Kuroshio and Adjacent Regions (Tokyo 18-20 August 1966.)
	3	Joint IPFC/IOC meeting on Fishery Aspects of CSK.

MINUTES

IPFC/C66/M	1	Minutes of the Opening Ceremony and First Plenary Meeting
	2	Minutes of Second Plenary Meeting
	3	Minutes of Third Plenary Meeting
	4	Minutes of Fourth Plenary Meeting
	5	Minutes of Fifth Plenary Meeting
	6	Minutes of Sixth Plenary Meeting
	7	Minutes of Seventh Plenary Meeting
	8	Minutes of Closing Plenary Meeting

APPENDIX V
(SUMMARY REPORT
PP. 37-38)

RECOMMENDATIONS FROM THE REPORT OF THE WORKING PARTY ON FRESH FISH PRESERVATION

Bangkok, 5-8 July 1966

The following recommendations refer to aspects of the problems which the Council considers as of immediate and direct significance to Member Governments:

Recommendation 1

It was recommended that Member Governments may determine the need for regular ice supplies in the fishing industry of their respective countries and to implement, at the earliest opportunity, a program of making adequate supplies of suitable types of ice available in areas where ice is not obtainable, of alleviating short supplies in areas where ice production is inadequate and of ensuring that available ice is never marketed at a price which may constitute a hindrance to the proper use of ice, hamper development of the fishing industry or be detrimental to the socio-economic welfare of fishermen.

Recommendation 3

Realizing the need for improvements in the handling of fish on board fishing vessels, Member Governments should examine with care the possibility of introducing the gutting and cleaning of fish at sea prior to icing without causing adverse effects to the economics of fish catching, in the knowledge of the importance of this practice being accepted by the consuming public, for whom it is primarily carried out, and

acknowledging the importance of fish stowage, Member Governments are similarly requested to investigate current methods of stowing fish in fish holds, the design and efficiency of such holds, with a view to introducing improved stowing practices by shelving or the use of containers, bearing in mind the need for economic and hygienic containers of uniform sizes and materials which will withstand the hard wear and tear of usage in fishing vessels.

Recommendation 4

The attention of Member Governments is drawn to the general need for improved containers used in the handling of fish onshore with particular regard to hygiene, standardization and the quality of fish carried in such containers, and

the need to ensure that re-icing is carried out in a satisfactory manner combined with maintaining the necessary low internal temperature of fish prior to re-icing particularly in the case of re-iced fish for transportation over long distances.

It is also recommended that re-icing with contaminated ice should be discouraged and the industry should be advised to use only fresh ice.

Recommendation 5

Member Governments may, investigate in detail the current practices of fish marketing in their respective countries with a view to establishing at the earliest opportunity orderly wholesale marketing facilities in which fish are auctioned. If it is found that a middlemen system or vested interests of other kinds prevent the socio-economic betterment of fishermen and the development of the industry both with regard to efficiency and increased production, efforts should be made to establish such orderly wholesale marketing facilities within a policy of encouraging the formation of fishermen's co-operative societies or associations with a view to the direct participation of fishermen in wholesale marketing functions and operations.

Prevailing standards of hygiene in fish handling should be determined with a view to introducing minimum standards of cleanliness in all stages either by legislation or by eduction as may be most practical in the circumstances and to ensure that such minimum standards are applied to all sections of the fishing industry including the handling at processing factories and retail outlets.

Recommendation 6

In consideration of the standards of containers used for the movement of fish being generally low in the Indo-Pacific Region, Member Governments may investigate the possibility of usage of such containers and to encourage the introduction of improved types of containers, particularly in relation to the carrying of fish over long distances, and

to consider the possibilities of providing insulated or refrigerated vehicles or vessels for fish carrying and to study the costs of freight charges for fish with a view to arranging cheaper rates, and

to promote and encourage fisheries co-operatives and associations in their undertaking transportation of fish where possible.

Recommendation 7

In view of the very limited knowledge available on fresh fish spoilage under the conditions existing in the Indo-Pacific Region, Member Governments may initiate investigations on fish spoilage with particular reference to species and the fishery at various stages in the handling including the need for ice in relation to fish prices.

Recommendation 9

The Working Party wishes to draw the attention of Member Governments to the need for examining the availability of scientists, technologists and fisheries workers and the necessary training for personnel concerned with the research and implementation of the various aspects involved in the recommendations made by this Working Party.

Joint IPFC/IOC
Meeting on Fishery Aspects
of CSK

RECOMMENDATIONS APPROVED BY THE THIRD MEETING OF THE INTERNATIONAL COORDINATION GROUP FOR THE COOPERATIVE STUDY OF THE KUROSHIO AND ADJACENT REGIONS

(Tokyo 18-20 August 1966)

Recommendations approved by the Third Meeting
of the International Coordination Group for the
Cooperative Study of the Kuroshio and Adjacent Regions

(Tokyo 18-20 August 1966)

Recommendation 1. Fisheries Aspects of CSK: Selection of Important Species

The Group considered the major commercially important species of the CSK area and selected a group of important pelagic species and a group of important demersal species for inclusion in CSK fishery studies. These are:

Pelagic species

1. Saury (Cololabis saira)
2. Skipjack tuna (Katsuwonus pelamis)
3. Spanish mackerel (Scomberomorus commersoni, S. lineolatus, S. guttatus)
4. Chub mackerel (Rastrelliger neglectus, R. kanagurta, R. brachysoma)

Demersal species

1. Yellow croaker (Pseudosciaenia manchurica)
2. Lizard fish (Saurida tumbil)
3. Goldenthread (Nemipterus virgatus)

Recommendation 2. Fisheries Aspects of CSK: Fisheries Problems

The Group requests the CSK National Coordinators or Assistant National Coordinators (whichever is concerned with fisheries) to furnish to the Assistant International Coordinator for Fisheries by 20 September 1966 the following information with respect to the selected list of important species:

1. A statement of studies now in progress, including the names of the investigators.

2. A statement of additional studies, if any, planned for 1967 and 1968.

3. A statement of the most pressing problem for each species.

This information will be used at the joint IOC/IPFC meeting in Honolulu (3-17 October 1966) as the basis for establishing the programme of CSK fishery studies.

Recommendation 3. Fisheries Aspects of CSK: Fishery Data Exchange

The Group agreed that in order to efficiently and adequately carry out fishery studies, it will be necessary to provide some mechanism to facilitate the exchange of fishery data. The kinds of fishery data for which this need exists include the following:

1. Catch statistics

2. Effort statistics

3. Age composition

4. Length composition

5. Other, as the need arises for special problems.

The Group requests the Secretary of IOC to approach the FAO in order to undertake this facilitation as a part of the function of the FAO Fishery Data Center.

Recommendation 4. Fishery Aspects of CSK: Trawl Intercalibration

The Group recognizes the need for trawl inter-calibration between the various trawl fisheries in the CSK area and suggests that this problem be approached by (1) analysis of the existing data and (2) the conduct of comparative tests at sea. The Group believes that work on this problem can best be carried out by a Working Group established for the purpose and requests Mr. William Chan to serve as Convener of the Working Group, drawing member of the Working Group from the appropriate laboratories in China, Japan, Korea, Thailand, and UK (Hong Kong). The Group requests that the Convener keep the Assistant International Coordinator for Fisheries informed of progress and report at the Fourth Meeting of the Group.

Recommendation 5. Shortage of publications

The Group recognizes that there is a shortage of publications in many CSK countries and requests the National Coordinator of each country to submit to the Editor of the CSK Newsletter for publication a list of periodicals and journals (and by whom published) produced in his country on subjects pertinent to CSK studies. Publication of these lists in the CSK Newsletter will enable individual laboratories to arrange for the exchange of publications of interest.

Recommendation 6. Fisheries Aspects: Joint IOC/IPFC Meeting

The Group requests the Secretary of the IOC to point out to the Indo-Pacific Fisheries Council the importance of allowing at least 3 days for the joint IOC/IPFC Meeting to discuss fisheries aspect of CSK to be held in Honolulu (October 1966) during the IPFC 12th Session.

Recommendation 7. Study of Variability of Kuroshio System

The Group recommends the following procedures for the Study on the Variability of the Kuroshio System:

1. (a) regular observations with research ships along standard sections and ocean data stations.

(b) multiple ship operations in selected areas at selected periods.

(c) continuous monitoring of currents with submarine cables.

(d) continuous measurements of sea-level with coupled tide gauge stations.

(e) continuous monitoring with automatic recording and/or telemetered instruments on islands and buoys (anchored or floating) and with airplanes.

(f) hydrographic stations to be occupied synoptically and continuously by each member country for three days or longer along the Kuroshio stream.

2. Studies on the biological variability in time and space should be encouraged.

3. A programme to study periods longer than seasonal periods should be kept in mind by IOC as an outgrowth or extension of the CSK.

Recommendation 8. Synoptic Survey of Kuroshio and South China Sea: General

The Group noted the national programmes for CSK for the second stage (July 1967 - June 1969) submitted to its third meeting, and considered that coverage north of 20°N in the Pacific area is satisfactory for the purpose of a seasonal synoptic survey. It is not adequate, however, in some parts of the CSK areas. Therefore, it was recommended that (1) participating countries be invited to undertake, regularly four times each year, cruises for the sections which are planned to be occupied less frequently, particularly in the South China Sea and south of 20°N, and also to establish new sections: (2) participating countries which are not bordering the South China Sea consider sending their ships to this region so that the synoptic survey would meet the requirement as set forth by the former meetings of the Group.

Recommendation 9. Synoptic survey of Kuroshio and South China Sea: Technical Assistance

The Group noted that the South China Sea is an important area considered as an integral part of the CSK programme. Many countries bordering the South China Sea have indicated their willingness to participate from 1967 in the second stage of CSK but the Group recognized that the cooperation of some of these countries in the CSK programme could not be satisfactorily undertaken without assistance from various agencies, and especially IOC, in obtaining necessary equipment, apparatus, experts etc.

The Group therefore recommends that the International Coordinator for CSK consider this matter and find out ways of providing appropriate assistance as soon as possible.

Recommendation 10. Synoptic Survey of Kuroshio and South China Sea Regions: Biological Programme

The Group requests National Coordinators to give full consideration to the biological aspects (primary productivity, chlorophyll, suspended matters etc. together with detailed chemical analysis of the water) of the synoptic surveys so that of sampling for the biological programme gives the most satisfactory coverage in terms of space and time.

Recommendation 11. Marine Geological and Geophysical Studies of the CSK

The Group noted that related marine geological and geophysical studies are included in the programme of CSK. The importance of close cooperation between international organizations working on geological and geophysical studies in oceanic and sea area was recognized. It was also considered that knowledge obtained by CSK programme would be particularly useful to the projects for exploiting natural resources in the ocean and the oceanic floor which have been launched by ECOSOC and ECAFE.

The Group agreed that National Coordinators would consider carrying out, as far as possible, the following observations.

1. survey of bottom profile with PDR or echosounder

2. collection of bottom samples with dredge, snapper and corer

3. measurement of gravity and geomagnetism in oceanic area

4. studies on the structure of the sea-floor with seismic and other appropriate methods

5. heat-flow measurement in sea-floor

The International Coordinator is requested to prepare for submission to the next meeting of the Group, in consultation with National Coordinators and ECAFE, ECOSOC and other appropriate bodies, a proposal for a coordinated geological and geophysical programme of CSK.

Recommendation 12. Collection and Sorting of Biological Samples: Standard Plankton Sampling Procedures

The Group recommended the following standard plankton sampling techniques for use in the second stage of CSK.

1. Zooplankton: Vertical haul from 150 m. with a Norpac net (45 cm x 180 cm, conical, 0.33 mm mesh) as carried out during the first stage. Cloth of 0.35 mm mesh apertures may be used instead of 0.33 mm mesh aperture when 0.33 mm cloth is not available.

2. Small-size Net Plankton: Similar haul to Zooplankton sample using a similar Norpac type net but with mesh aperture of 0.1 - 0.15 mm.

3. Micro-plankton and Nanno-plankton: At least one litre of water from 10 m depth at each station. Preserve in 1% formalin; may be concentrated by settling or centrifugal methods. Samples should be stored in glass bottles.

In 1 & 2 the hauling speed should not exceed 1m/sec. and the volume of water filtered should be registered by a flow-meter.

Zooplankton samples are the minimum requirement of the programme, samples of small size net plankton and micro- or nanno-plankton are desirable and should be taken where possible. Sampling with other methods may be also carried out by individual countries to suit the particular programmes of each individual country. The depth of sampling may depend on the zonation of the water masses and will cover the great depths. On ships which are capable of doing so primary productivity, cholorphyll, etc. should be studied.

Sampling of macroplankton or micronekton should not be overlooked.

This group is composed of animals of an important trophic level between plankton and commercially valuable fish. No particular type of gear can be recommended at this stage but the development of such gear should be encouraged.

Recommendation 13. Collection and Sorting of Biological Samples: Biological Centre and Sorting Service for CSK

The consideration of UNESCO to assist in the establishment of a Biological Centre for CSK is welcomed. Such an establishment and the early inauguration of sorting (especially of standard net plankton samples) work are urgent necessities. Samples of micro-plankton are also studied most effectively by gathering them at a centre, they cannot be sorted but kept as a whole, they may be studied by specialists.

1. The Biological Centre should have a broad charter but it should be emphasized that the Sorting Service for standard plankton samples is of primary importance. The Sorting Service is considered to be primarily a means of effecting further studies by specialists. However it is our understanding that the activity of the centre will greatly stimulate the advancement of studies on marine biology in the region where the centre is established.

2. Since from Unesco's point of view, it is more desirable that the Biological Centre should be established in a developing country, Unesco should be authorized to explore the question of establishing the Centre in such a country in the CSK regions.

Meanwhile, the Secretary of IOC is requested to approach the Government of Japan to assist by supplying a Sorting Service for CSK.

3. It is urged that all vessels on CSK cruises make standard plankton collections (See Recommendation 12) and that these are sent to the plankton sorting centre once it is established.

Recommendation 14. Maritime Meteorology

The Group noted that the oceanographic surveys under the programme of CSK have close relation with the maritime meteorology, and that fruitful results have been obtained from the atmospheric circulation research projects of the International Indian Ocean Expedition programme, and that the sea area in which CSK programme is undertaken, is the theatre of several tropical storms and, therefore, safety of operation of research ships is of utmost importance. As the problem of air-sea interaction is becoming increasingly more and more important as a common interest of both oceanography and meteorology and as some part of the sea areas covered by the CSK programme is so called "sparse area" as to meteorological data, particularly, is respect of upper air observation for research and operational purposes.

The Group recommends that the research ships of CSK to conduct surface meteorological, as well as upper air and RADAR observations if possible, at synoptic hours and transmit them, in an adequate FM code to the competent meteorological services through coastal radio stations as stipulated by the WMO procedure; and request the Secretary of IOC to request the Director-General of WMO to take necessary action to ensure that the meteorological services concerned will make efforts to notify research ships of CSK of the presence and forecast hazardous sea condition by severe storm through the means of established WMO practice and procedures and when this is not practicable and if agreed upon among parties concerned, through some other means such as commercial telecommunication channel.

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

CONSEIL INDO-PACIFIQUE
DES PECHES

CONSEJO DEL INDO-PACIFICO
PARA PESQUERIAS

I N D O - P A C I F I C F I S H E R I E S C O U N C I L
F.A.O. Regional Office for Asia and the Far East
Bangkok, Thailand

12th Session, Honolulu, Hawaii, U.S.A.
3rd-17th October 1966

IPFC/C66/CP23

LIST OF FAO TRAINING CENTRES AND SEMINARS CONCERNING FISHERIES, 1950-1965*

Year	Subject	Place and Date	Region covered	Number of Participants
1952	First Latin American Fisheries Training Centre	Valparaiso, CHILE 6 Jan.-14 Mr.	Central and South America	43
1952	Indo-Pacific Fish Culture Seminar	Bogor and Djakarta, INDONESIA 1 May - 15 Jun.	Indo-Pacific	17
1952	Indo-Pacific Fisheries Statistics Training Centre	Bangkok, THAILAND 19 June-31 July	Indo-Pacific	36
1953	International Training Centre in Fishery Biology	Istanbul, TURKEY 21 Sept.-17 Oct.	Near East	19
1954	First FAO International Fish Marketing Training Centre	HONG KONG 11 Jul.-31 Aug.	Indo-Pacific	16
1954	Second Latin American Fisheries Training Centre	Mexico City, MEXICO 4 Oct.-10 Dec.	Central and South America	46
1955	International Training Centre for Fishery Administrators	Copenhagen, DENMARK 29 Aug.-7 Oct.	Africa Near East Mediterranean	21
1955	Third International Inland Fisheries Training Centre	Bogor, INDONESIA 31 Oct.-10 Dec.	Indo-Pacific	20

* Prepared by Administration and Education Section, Fishery Economics Development Branch, Dept. of Fisheries, FAO Rome, on data which have been made available by the Fellowships and Training Branch, FAO Rome.

Year	Subject	Place and Date	Region covered	Number of Participants
1956	South Pacific Fisheries Training Course	Noumea, NEW CALEDONIA 19 Nov. 1956 - 20 Feb. 1957	South Pacific	25
1957	Latin American Fish Processing Training Centre	Lima, PERU 21 Oct.-14 Dec.	Central and South America	23
1957	FAO Training Centre on Fishery Co-operatives and Administration for the Indo-Pacific Region	Sydney and Adelaide, AUSTRALIA, 16 Dec.-25 Jan.	Indo-Pacific	26
1958	International Training Centre on the Methodology and Techniques of Research on Mackerel (Rastrelliger)	Bangkok, THAILAND 20 Oct.-28 Nov.	Indo-Pacific	19
1959	FAO/IPFC Training Centre in Fishery Statistics	Bombay, INDIA 13 Feb.-30 Apr.	Indo-Pacific	22
1959	International Training Centre in Fishery Statistics	Copenhagen and Frederickshaven, DENMARK 17 Aug.-19 Sept.	Mediterranean Africa Near East	20
1959	Training Centre on Fishery Surveys for the Countries in the African Region	Tanga, TANGANYIKA 9 Nov.-18 Dec.	Africa	23
1960	Fishermen's Training Centre	Suez, U.A.R. 1 Sept.-17 Oct.	Near East	21
1960	Latin American Inland Fisheries Training Centre	Buga, COLOMBIA 1 Feb.-12 Mar.	Central and South America	30
1961	Training Centre on Fish Processing Technology	Quezon City, PHILIPPINES 6 Mar.-14 Apr.	Indo-Pacific	24
1961	Training Centre on Fishing Methods and Mechanization for South Pacific Commission countries and territories	Tulagi, BRITISH SOLOMON ISLANDS AND PROTECTORATE 23 Aug.-6 Nov.	South Pacific	25
1961	Seminar and Study Tour for Fishery Administrators	U.S.S.R. 11 Sept.-13 Oct.	Africa N. East Asia	10

Year	Subject	Place and Date	Region covered	Number of Participants
1962	Seminar and Study Tour on Fishing Methods and Fishing Gear Technology	U.S.S.R. 20 Aug.-21 Sept.	Asia, Africa Mediterranean	27
1963	Seminar on Fishery Development Planning and Administration	Legon, GHANA 8-27 July	Africa (English-speaking)	28
1964	Seminar on Fishery Development Planning and Administration	Canberra, AUSTRALIA 29 Jan.-14 Feb.	Indo-Pacific	32
1964	Seminar on Sardine Tagging	Split, YUGOSLAVIA 2-14 Nov.	Mediterranean	8
1964	Training Centre on Mackerel and Tuna Research	Cronulla, AUSTRALIA 2-27 Nov.	Indo-Pacific	18
1965	Seminar on Fisheries Development Planning and Administration	Abidjan, IVORY COAST 8-27 March	Africa (French-speaking)	17
1965	Training Centre for Fishing Boat Design	Göteborg, SWEDEN	English-speaking (Region not specified)	17
1965	Seminar/Study Tour on Fishermen's Training	U.S.S.R. 26 Aug.-17 Sept.	Eastern Hemisphere	23

IPFC/C.66/CP 37

INDO-PACIFIC FISHERIES COUNCIL 12TH SESSION

Symposium on Fisheries Education and Training

BOOKS USED IN TRAINING JAPANESE FISHERY STUDENTS (HIGH SCHOOL LEVEL)

7-001	Suisan seizō (Manufacturing of marine products) part 1
7-002	Suisan seizō hōki (Regulations pertaining to fishery products manufacturing)
7-003	Suisan seizō (Manufacturing of marine products) part 2
7-005	Suisan dōboku (Construction in fisheries)
7-006	Kikan sekkei kōsaku (Engine design and construction)
7-1011	Gyogyō (Fishery) book 1
7-1015	Suisan boki (Bookkeeping in fishery)
7-1017	Kōkai (Navigation)
7-1020	Suisan zōshoku (Fish culture) part 1
7-1022	Kaiyō kishō (Oceanography-meteorology)
7-1023	Suisan seibutsu (Marine animals)
7-1024	Suisan seizō (Fishery products) part 3
7-1026	Suisan biseibutsu (Marine bacteria)
7-1027	Gyogyō (Fishery) part 3
7-1028	Gyogyō (Fishery) part 2
7-1029	Hakuyō denki (Marine electricity) part 1
7-1030	Hakuyō denki (Marine electricity) part 2
7-1031	Suisan kikai (Machinery in fisheries)
7-1032	Gyosen (Fishing vessels)
7-1033	Unyō (Applied navigation)
7-1034	Reizō reitō (Refrigeration-freezing)
7-1035	Suisan zōshoku (Fish culture) part 2
7-1036	Suisan seibutsu (Marine animals)
7-1037	Suisan keiei (Fisheries management)
179-007	Suisan ippan (General fishery)
179-008	Suisan kagaku (Marine chemistry)

These books have been loaned to the IPFC by the Japanese Ministry of Education.

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Bangkok, Thailand

12th Session, Honolulu, Hawaii, U.S.A.
3rd - 17th October 1966

IPFC/C66/INC 1

IPFC 12TH SESSION

PROVISIONAL PROGRAMME

1st	October	Sat.		Registration and Distribution of Documents
2nd	"	Sun.		Free
3rd	"	Mon.	1030-1200	Official Opening Ceremony, Kennedy Theatre
			1400-1730	Plenary Meeting, Jefferson Hall
4th	"	Tues.	0900-1200	Plenary Meeting
			1400-1730	Technical Committee Meetings
5th	"	Wed.	0900-1200	Symposium
			1400-1730	"
			1930-2230	"
6th	"	Thurs.	*0900-1200	Symposium
			1400-1730	"
7th	"	Fri.	0900-1200	Visit Bureau of Commercial Fisheries Laboratory
			1400-1730	Visit BCF Kewalo Basin Facility and Hawaii Fish & Game Fish and Shrimp Culture Stations
8th	"	Sat.	0900-1000	Plenary Meeting
			1000-1200	Technical Committee Meetings
			p.m.	Free (visit Sea Life Park and Waikiki Aquarium)
9th	"	Sun.		Free

* Note: Should the Symposium discussion be completed ahead of the time scheduled above, arrangements will be made to convene the Technical Committees.

10th October	Mon.	0900-1000	Plenary Meeting
		1000-1200	Joint IPFC/IOC Meeting Technical Committee II Meeting
		1400-1730	Joint IPFC/IOC Meeting Technical Committee II Meeting
11th "	Tues.	0630-0800	Visit Fresh Fish Market
		0900-1200	Joint IPFC/IOC Meeting Technical Committee II Meeting
		1400-1730	Joint IPFC/IOC Meeting Technical Committee II Meeting
12th "	Wed.	0900-1000	Plenary Meeting
		1000-1200	Technical Committee Meeting
		1400-1730	Technical Committee Meeting
13th "	Thurs	0900-1030	Plenary Meeting
		1030-1200	Technical Committee Meeting
		1400-1730	Technical Committee Meeting
14th "	Fri.	0900-1200	Technical Committee Meeting
		1400-1730	Joint Committee Meetings
15th "	Sat.	0900-1030	Joint Committee and Resolutions
		1030-1200	Visit Tuna Cannery
		p.m.	Free
16th "	Sun.		Demonstration Cruises on BCF Research Vessels CHARLES H. GILBERT and TOWNSEND CROMWELL
17th "	Mon.	0900-1200	Adoption of Report and Closing Plenar

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IPFC/C66/CP 24

FELLOWSHIPS, SCHOLARSHIPS, STUDY AND TRAVEL GRANTS IN THE FIELD OF FISHERIES awarded by FAO under its Expanded Technical Assistance Program, 1951-1966*

Year	Name and Occupation	Field of Training	Months	Period and Country of Training
ARGENTINA				
1964	Francisco Saverio GNERI	Fisheries Biology and Oceanography	1½	8/64-9/64 USSR
1966	Enrique Eduardo BOSCHI	Fisheries Biology and Oceanography		USSR
1966	Alberto NANI	"		"
BOLIVIA				
1966	Rene BALDERRAMA Medeano	Inland Fisheries Research Management and Fish Culture		USSR
BRAZIL				
1957	P. Soares MOREIRA Naturalist, Oceanographic Institute, University of Sao Paulo	Fisheries Biology	12	12/57-12/58 Norway, Denmar UK, Portugal
1957	R. Cauby LAMPRECHT Research Engineer, Fisheries Division Min. of Agriculture	Fish processing (engineering aspects)	12	4/58-4/59 Germany, UK Denmark, Canad USA

* Prepared by Administration and Education Section, Fishery Economics Development Branch, Dept. of Fisheries, FAO Rome, on data which have been made available by the Fellowships and Training Branch, FAO Rome.

Year	Name and Occupation	Field of Training	Months	Period and of Trai
1959	Ko WATANABE Bacteriologist, Fisheries Technology Research, Fish and Game Dept., Min. of Agriculture, Rio de Janeiro	Bacteriology in fish spoilage	12	10/59-10/6 Denmark, U Canada
1962	Gelso VAZZOLER Fishery Research Biologist Instituto Oceanográfico da Universidade de São Paulo	Fisheries Biology	11½	6/62-6/63 UK, Denmar Norway, Ge Netherland
1962	Mamoru TINONE Economist at the Terminal Wholesale Market, Centro Estadual de Abastecimento S.A. - CEASA - São Paulo	Fish Marketing	3	3/63-6/63 Japan, Hon Spain, UK
1964	Ernesta TREMEL	Fisheries Biology and Oceanography	1½	8/64-9/64 USSR
1964	Getúlio DE SOUZA NEIVA	Fisheries Biology and Oceanography	1½	8/64-9/64 USSR
1966	Pereira DOS SANTOS Edison	Fisheries Biology and Oceanography	1½	USSR
1966	Gelso VAZZOLER	Fisheries Biology and Oceanography	1½	USSR
CEYLON				
1956	Habakkala H.A. INDRASENA Superintendent of Fresh Water Fisheries, Dept. of Fisheries	Fish Culture	5	8/56-1/57 Malaya, Ho Thailand,
1956	Hettiarachige A. PERERA Marine Engineering Asst. Department of Fisheries	Repair and maintenance of fishing vessels (marine engineering)	14½	3/57-5/58 UK
1959	Telesphore G. PILLAI Superintendent Brackish Water Fisheries Dept. of Fisheries Ceylon	Brackish water fishing	6	4/60-10/60 Philippines Indonesia, Hong Kong

Year	Name and Occupation	Field of Training	Months	Period and Country of Training
1962	E.J.H. Peter MENDIS Marine Engineering Asst. Fisheries Research Station Colombo	Boat Building	12	3/63 - UK
1965	Habakkala Hewage Arthur INDRASENA	Inland Fisheries Research Management and Fish Culture	1	7/65 - 8/65 USSR
1966	Muttutamby DURAIRATNAM	Fisheries Biology and Oceanography		USSR
1966	Telesphore Gottfried PILLAI	"		"
CHILE				
1964	Antonio BORIES Head, Department of Fish Technology, General Directorate of Fisheries Valparaiso	Fish Technology	9	8/54 - 5/55 Italy, Norway, Iceland, UK, Denmark, Germany, Spain, Morocco
1954	Marcelo MONTT de Ferari Legal Adviser, General Directorate of Fisheries Santiago	Fisheries institutions and services	10½	1/54 - 12/54 Italy, Sweden, Denmark, UK, Spain, Portugal, Germany, Netherlands, Belgium, France, Norway
1954	Nibaldo BAHAMONDE, N. Head, Section of Hydrobiology, Chilean Museum of Natural History; Asst. Prof., University of Chile; Adviser, Fish and Game Department, Min. of Agriculture	Fisheries Biology	10½	3/55 - 2/56 Norway, Denmark, Sweden, UK.
1956	Giaume VIDAL Alessandrini Fish Technology Specialist Fish and Game Dept., Min. of Agriculture	Fishery economics and Statistics	6	3/56 - 9/56
1962	Anelio AGUAYO Lobo Anxiliar Biologo Instituto de Biologia del Departamento de Ciencias Universidad de Chile	Whale biology	9	2/63 - 11/63 UK, Norway, USA

Year	Name and Occupation	Field of Training	Months	Period and C of Traini
1964	Nibaldo BAHAMONDE Navarro	Fisheries Biology and Oceanography	1½	8/64 - 9/64 USSR
1964	Walter FISCHER Kuntz	"	"	"
1964	Sergio LAGOS Ffrench-Davis	Fisheries Administration	3½	7/64 - 10/64 Peru, Ecuado Italy, UK, G USA
1965	Claudio ROMO Romo	Fisheries Technology	12	9/65 - USA, Canada
1965	Jorge Guillermo PARKER Parada	General Field of Acoustics	5½	5/65 - 11/65 Norway, Icel
1965	Max RUTMAN	Food Engineering	12	9/65 - USA, Canada
1966	Randolfo Edmundo SANHUEZA Ward	Fishing Technology	6	4/66 - Norway, UK
1966	Mario Alberto LIEBESCHUTZ	Fisheries Economics and Technology	6	4/66 - UK, Germany, France, Ital
1966	Fernando L.E. ROBLES	Oceanography	13	6/66 - USA
1966	James Francis STEEL	Fisheries Technology	7	UK, Denmark, Yugoslavia,
1966	Sergio AVILES Goycoolea	Fisheries Biology and Oceanography		USSR
1966	Hugo Leonel BARRALES Pizarro	"		"
1966	Ulises Eduardo GIL Repfenning	"		"
1966	Sylvia SOTO Bussard	Inland Fisheries Research Management and Fish Culture		"
1966	Irma VILA Pinto	"		"

Year	Name and Occupation	Field of Training	Months	Period and Country of Training
COLOMBIA				
1956	Roberto CARBONELL Manager, Fishery Packing Plant, Santa Marta	Fishery industry	6	3/57 - 9/57 Spain, Portugal France
1960 BS	Luis E. DIAZ Wieckowski Asesor del Departomento de Caza y Pesca Ministerio de Agricultura	Fish Culture and Management	14	1/61 - 3/62 USA
1962 BS	Francisco CARREJO Bejarano Orientador Agrícola da la Fundación Universidad de Bogotá	Zoology and Fish Culture	9	3/62 - 12/62 Brazil
1962	Jorge Enrique SANCLEMENTE Zapata, Técnico de Pesca, Instituto de Piscicultura Tropical, Ministerio de Agricultura y Ganaderia, Buga	Pisciculture	3	6/63 - 9/63 Mexico
1966	Alvaro PEREZ	Fisheries Biology and Oceanography		USSR
CONGO (Brazzaville)				
1964	Jean Paul TRAODEC	Fisheries Biology and Oceanography	1½	8/64 - 9/64 USSR
1966	Francis Roger Jules POINSARD	"		USSR
CUBA				
1966	Luisa LOPEZ Baluja	Fisheries Biology and Oceanography		USSR
CYPRUS				
1966	Andreas DE.ETROPOULOS	Fisheries Biology and Oceanography		USSR

Year	Name and Occupation	Field of Training	Months	Period & of Tra
DAHOMEY				
1964	Francis Xavier PARAISO	Fisheries Biology and Oceanography	1½	8/64 - 9/6 USSR
(Second Fellowship) 1964	Francis Xavier PARAISO	Marine Fisheries Biology	12	10/65 - France, Be
ECUADOR				
1953	Claudio REYES Wamdemberg Assistant Professor, National Polytechnical School	Fisheries Biology	12½	1/54 - 1/5 France
1954	Guillermo J. MIGNONE Topography Assistant Directorate of Inland Fisheries	Fisheries Technology	6	4/55 - 10/
1955	Gonzalo E. GUZMAN Ortega Economic Research Assistant on National Income, Banco Central	Fisheries Economics	10½	5/56 - 4/5 Italy, Spa Chile
1956	Gustavo R. JIMENEZ Arrarte Head of the Fish and Game Department, Ministry of Economy	Fisheries Administration	7	4/57 - 11/ USA, Spain Italy, Por
1963	Mario Humberto COBO Cedaño	Biology	7½	6/63 - 1/6 Spain, Net lands
1963	Lucia Marta SOLORZANO Constantine	Fisheries Chemistry	12	10/63 - 10/ USA
1963	Quinto AVILA Medina	Marine Biology	6	7/64 - 10/ USA
1964	Wilson Homero ESPINOSA Reyes	Fisheries Economics	6	3/64 - 9/6 Spain, Por
1964	José Esteban SANTORO Icaza	Fisheries Investigation	12	11/64 - 11/ Brazil
1964	Effren Armando LOPEZ León	Marine Biology	6	10/64 - 4/6 Argentina

Year	Name and Occupation	Field of Training	Months	Period & Country of Training
1964	C. Anibal ORBES Armas	Fisheries Economics	3	2/65 - 5/65 USA, Peru, Chile
1964	Angel Luis ANSALDO Garcés	Ichthyology	12	4/65
1964	Pedro José VALDERDE Arias	Fisheries Technology	6½	4/65 - 10/65 Italy, France, Spain
1966	Leonor NAVARRETE Molina	Chilling, Freezing Techniques and Equipment		France
EL SALVADOR				
1960	Oscar CERRATO Valenzuela Head, Fisheries Section, Dept. of Economic Development, Min. of Economy San Salvador	Shrimp Research	4½	6/61 - 11/61 Panama, Mexico, Ecuador
1960	Rene HERNANDEZ Escobar Fisheries Section, Ministry of Economy San Salvador	Shrimp Research	4½	6/61 - 11/61
1961	Carlos Alberto FUENTES Jefe de Pesca Continental Ministerio de Agricultura y Ganadería	Inland Fisheries	11	3/63 - 4/63 USA, Mexico
1962	Mauro Atilio MARTINEZ Zepeda, Inspector de Pesca, Ministerio de Economía	Inland Fisheries	1	3/63 - 4/63 Panama
1962	Luis ALAS Rodríquez	Inland Fisheries	2½	3/63 - 5/63 Panama
1962	Elsias ORDOÑEZ Navarro Inspector de Pesca Ministerio de Economía	Inland Fisheries	1	4/63 - 5/63 Panama
1962	Eliseo AYALA Naravilla Inspector de Pesca Ministerio de Economía	Inland Fisheries	1	3/63 - 4/63 Panama
1962	Nelson MORAN Campos Auxiliar de Pesca Sección de Pesca y Caza Marítima	Inland Fisheries	1	3/63 - 4/63

Year	Name and Occupation	Field of Training	Months	Period & C of Trai
1962	Salvador REINA Avalos Auxiliar de Pesca Sección de Pesca y Caza Marítima	Shrimp Marketing and Sampling	1	4/63 - 5/6 Panama
1962	Rodolfo RUBIO Marán Auxiliar de Cátedras de Biológia Facultad de Ciencias Químicas	Inland Fisheries	2	5/63 - 7/6 Panama
1962	Ricardo Alfonso QUEVEDO Molina, Jefe de Campo y Reconocedor de la Direccion General de Cartografia	Collection and Analysis of Water Samples	1½	5/63 - 7/6
1962	Manuel Rafael ARCE Economista Especializado Ministerio de Economia	Fisheries Economics	2	6/63 - 9/6 Canada
ETHIOPIA				
1966	Osman Idris AMAN	Inland Fisheries Research Management and Fish Culture		USSR
FINLAND				
1952	Olavi NIKKILA Chief Chemist, Director of Laboratory, Tukku- kauppojen Food Company Turku	Canning and preservation of fish, quick freezing, use of byproducts and waste of fish	6	1/53 - 7/5 USA
1953	Lero T. KAJOSAARI Working at the Board of Agriculture	Water pollution control, fishery engineering with respect to fish passes and fish culture	6	5/54 - 11/ UK, Sweden
1953	Erkki SILTANAA Inspector of Fisheries	Inland fisheries biology with emphasis on cold water fish culture	6	9/53 - 3/5 USA
1953	Tauno K. KAARTOTIE Deputy Commissioner Division of Fisheries Board of Agriculture	Fisheries, administrative application of modern research and regulation in marine and fresh water fisheries	6	3/53 - 9/5 USA, Canada

Year	Name and Occupation	Field of Training	Months	Period & Country of Training
1953	Erkki HALME Chief, Fisheries Research Bureau, Ministry of Agriculture	Inland and marine fishery biology	6	9/53 - 3/54 USA
1954	Arthur L. WIKSTROM Adviser on Fisheries Ministry of Agriculture	Fisheries administration and statistics	6	5/54 - 10/54 Sweden, Norway, Denmark, Germany, Netherlands
1956	Reino K. RYHANEN Fishery Biologist Fishery Research Bureau	Water chemistry and water pollution research	4	8/57 - 11/57 Germany, Austria Switzerland, Sweden
FRENCH TERRITORIES - NEW CALEDONIA				
1959	Roger G.M. DESROSIERES Attached to Office de la Recherche Scientifique et Technique Outremer, Paris	Planktonological Research for Fisheries Biology	12½	3/59 - 3/60 Australia
GHANA				
1962	Eric Ago KWEI Fisheries Officer Ministry of Agriculture	Marine Fisheries Biology	9	10/62 - 7/63 UK, Israel, USSR
1964	Martin Alabi MENSAH	Marine Fisheries Biology with emphasis on planktonology	11½	3/64 - 3/65 UK
GREECE				
1965	John DROUKALIS	Inland Fisheries Research Management and Fish Culture	1	7/65 - 8/65 USSR
GUATEMALA				
1955	Julio R. PADILLA Head of Forestry and Natural Resources (Eastern Zone), Min. of Agriculture	Inland fisheries biology	10½	1/56 - 12/56
1962	Mario Alberto SAAVEDRA Paz, Jefe del Departamento de Caza y Pesca Ministerio de Agricultura	Fish culture and inland fisheries	12	9/63 - USA

Year	Name and Occupation	Field of Training	Months	Period & C of Trai
GUINEA				
1965	Ibrahim BALDE	Inland Fisheries Research Management and fish culture	1	7/65 - 8/6 USSR
HAITI				
1951	Leonce BONNEFIL Administrator, Fisheries Section	Fish Culture	2	9/51 - 11/ Indonesia
1952	Emmanuel J. GARNIER Assistant Fish Culturist	Fish Culture	3	8/52 - 11/ Brazil, Netherland Guiana
HONDURAS				
1964	Jesús Roberto FLORES Lopez	Fishery Biology	2	1/65 - 3/6 Ecuador, Ve zuela, El Salvador
1964	Tomás ESCOTO Manzano	Fisheries Biology	2	1/65 - Honduras
INDIA				
1956	Narayanrao C. KOLI Managing Director Bombay State Fishermen's Cooperative	Fisheries cooperatives and marketing	5½	3/57 - 8/57 Canada, Hon Kong, Japan Sweden, Den
1957	Davidson THOMAS Inspector of Fisheries (Deep Sea Fishing), Pamban	Practical fishing (fishing methods)	9	2/58 - 11/5 Iceland, US Denmark, Ge Italy
1957	Devadoss A.S. GNANADOSS Assistant Director of Fisheries (Craft and Tackles), Madras	Boat-building and mechanization	9½	8/58 - 6/59 UK, Norway, Denmark, It Turkey
1959	Tyagarajan SATHIAVEDU Superintendent, Inshore Fishing, Rameswaram	Organization of Fisheries Training Centres	6½	11/59 - 6/6 Italy, Neth lands, UK, N Iceland, De Belgium

Year	Name and Occupation	Field of Training	Months	Period & Country of Training
1963	Narainrao Prahlad BHAKTA	Harbour Engineering	6	4/64 - 10/64 Sweden, Denmark Germany
1964	Vanteddu Satyanarayana DEVARA	Naval Architecture	12	11/64 - 10/65 Italy, UK, Senegal Netherlands, Denmark, Sweden
1965	Vishna Gopal JHINGRAN	Inland Fisheries Research Management and Fish Culture	1	7/65 - 8/65 USSR
1965	Valiaveetil Chacko GEORGE	Fishing Gear Design and Methods	9	1/66 USSR
1965	Sma Gopalan NAYAR	"	9	1/66 USSR
1965	Audesh Narain SINGH	"	9	1/66 USSR
1965	Varadaraja RANGANATHAN	Inland Fisheries Research Management and Fish Culture	1	7/65 - 8/65 USSR
1966	Gyan Prakash DUBEY	Inland Fisheries Research Management and Fish Culture		USSR
1966	Harbans Lal TANDAN	"		USSR
1966	George MATHEW	Fish Harbour Engineering	12	Sweden, Netherlands, Germany
1966	Ramakrishna Pillay Ramachandran NAIR	Naval Architecture	12	Japan, Sweden
INDONESIA				
1959	Soekoesnoe MANGUNDJOJO Assistant Biologist Research Division on Marine Resources, Sea Fisheries Service Ministry of Agriculture	Marine Biology (shrimp)	5½	7/59 - 1/60 Australia
1964	Ibrahim TANSU	Fisheries Biology and Oceanography	1½	8/64 - 9/64 USSR

Year	Name and Occupation	Field of Training	Months	Period & Cour of Traini
IRAN				
1962	Hossein HORMOZI Chief, Department of Governmental Land and Buildings, Ministry of Finance	Fish culture and Management	15	9/62 - 12/63 Belgium, Net lands, Germa Denmark, Swe
1962	Esmail Peidae SAHELI Technical Manager Fisheries Department (Shielat), Min. of Finance	Fish Refrigeration	6	9/62 - 3/63 UK, Germany, Denmark
1964	Esfandiar GOLESORKHI	Inland Fish Culture	12	USA
1965	Mahmood Abed SALIMI	Inland Fisheries	12	Yugoslavia
1965	Mohamed Reza KOLEINI	Inland Fisheries Research Management and Fish Culture	1	7/65 - 8/65 USSR
IRAQ				
1965	Mahmoud Ibrahim AL-HAMED	Inland Fisheries Research Management and Fish Culture	1	7/65 - 8/65 USSR
1966	Issam Sadik MALAIKA	Inland Fisheries Research Management and Fish Culture		USSR
ISRAEL				
1952	Shmuel SARIG Director, Regional Research Station	Fish breeding	$3\frac{1}{2}$	1/52 - 4/52 Thailand, In Singapore, I nesia
1952	Haim ILAN Chief Officer, Fish-breeding Section Ministry of Agriculture	Fish culture	$3\frac{1}{2}$	1/52 - 4/52 Thailand, In Singapore, I nesia
1953	Yoel ARIAV Chief, Shore and Pelagic Fishing Branch, Dept. of Fisheries	Shore and pelagic fishing	3	6/53 - 3/53 Yugoslavia, Italy, Spain

Name and Occupation	Field of Training	Months	Period and Country of Training
Izchak SCHMALINSKI Skipper, Fishing Trawler "Zofia"	Shore and pelagic fishing	3½	6/53 - 9/53 Italy, Greece, Spain, Netherlands
Mordechai EHRLICH Manager of Fishing Operations	Management of fishery enterprises	1 2½	1/55 - 2/55 Portugal, Spain 11/55-2/56 Senegal, Morocco
Rafael RUPPIN Director, Fishery Governmental School	Fishery vocational training methods	4½	2/55 - 7/55 UK, Norway, Netherlands, Belgium
Benzion KAGAN Production Manager "Noon" Canning Factory Atlit	Fish canning	3	11/55 - 2/56 Germany, 8/56 - 10/56 Denmark, France, Portugal
Moshe KRAMER KAMER Chief, Sea Fishery Section, Deputy Director Division of Fisheries	Management of fishery enterprises	4	10/57 - 2/58 UK, France, Italy Germany, Spain, Greece
Haim O OREN Deputy Director, Sea Fisheries Research Station Ministry of Agriculture Tel Aviv	Handling and Preservation of fish	6½	3/60 - 10/60 Japan, Germany Denmark, Yugoslavia
Meir B. BAR-ILAN Chief, Fresh Water Fisheries Branch, Division of Fisheries, Min. of Agriculture	Lake Fisheries	4	4/60 - 8/60
Baruch KOMAROVSKY-KEYMORE Senior Biologist in charge of the Plankton Laboratory Sea Fisheries Research Station, Min. of Agriculture	Pelagic fisheries	6	7/61 - 2/62 UK, France, Yugoslavia
Oton Haim OREN	Fisheries Biology and Oceanography	1½	8/64 - 9/64 USSR
Abraham YASHOUV	Inland Fisheries Research Management and Fish Culture	1	7/65 - 8/65 USSR
Eliezer GILAT	Fisheries Biology and Oceanography in connection with second Oceanographic Congress	1	USSR

Year	Name and Occupation	Field of Training	Months	Period and Country of Training
1966	Shmuel SARIG	Inland Fisheries Research Management and Fish Culture		USSR
IVORY COAST				
	Emile MARCHAL	Fisheries Biology and Oceanography in connection with second Oceanographic Congress	1	USSR
JAPAN				
1957	Toshio HOMMA Chief, Data Branch Data and Statistics Section, Min. of Agr. and Forestry	Marketing system and transportation of marine products (fish trading)	6½	5/57 - 12/57 UK, Denmark, Sweden, Netherlands, Germany
1957	Tadashi YAMAMOTO Chief, Catch Statistics Branch, Fisheries Statistics Section Central Government	Fishery statistics	6½	2/58 - 8/58 India, Ceylon, UAR (Egypt), Italy, Denmark
1958	Kunio YONEZAWA Chief, Conservation of Salmon Branch, Ministry of Agriculture and Forestry	Conservation of salmon and other anadramous and fresh	6	6/58 - 12/58 USA, Canada
1960	Tatsuo SAITO Technical Officer Statistical Survey Division, Min. of Agr.	Fishery Census	6	9/60 - 3/61
1962	Yoshihiro MATIDA Chief, Freshwater Fisheries Research Laboratory, Fishery Agency, Min. of Agr. and Forestry	Bio-geochemistry of Hydrosphere	12	1/63 - USA
KENYA				
1964	Norbert ODERO	Fisheries Biology and Oceanography	1½	USSR

Year	Name and Occupation	Field of Training	Months	Period and Country of Training
KOREA				
1958	Jae Ho LEE Navigator, Fishing Section, Central Fisheries Experiment Station, Office of Marine Affairs, Pusan	Purse seine fishing and trawling	6	12/58 - 6/59 Denmark, Norway Italy, Hong Kong
1959	Hee Un CHANG Asst. Chief, Processing Section, Central Fisheries Experiment Station Office of Marine Affairs	Fish canning	6	9/59 - 4/60 Italy, UK, Norway Germany, Denmark Hong Kong
1959	Bu Kwan CHUNG Asst. Technician, Fishing Ground Group, Fishing Section, Central Fisheries Experiment Station, Office of Marine Affairs	Survey of fishing resources and fishing grounds	12	8/59 - 9/60 Canada, Hawaii Japan
1959	Ji Hwan CHANG Asst. Technician Oceanographic Section Central Fisheries Experiment Station, Office of Marine Affairs	Fisheries Oceanography	12	8/59 - 9/60 USA, Canada Hawaii
1959	Jai Dong RO Fisheries Administration Section, Bureau of Fisheries, Office of Marine Affairs	Fish Cold Storage and refrigeration	6	9/59 - 4/60 Germany, Norway UK, Denmark, Hong Kong
1959	Jong Do LEE Higher Official, Fisheries Administration Section, Fisheries Bureau, Office of Marine Affairs	Fishery Administration and cooperatives	6	5/60 - 10/60
1959	Byung Sun BANG Asst. Technician, Fishing Gear and Method Group, Fishing Section, Central Fisheries Experiment Station, Office of Marine Affairs	Fish Detection Equipment and Methods	6	7/59 - 1/60 Germany, Norway UK, USA, Canada

Year	Name and Occupation	Field of Training	Months	Period & Country of Training
1959	Yong Joon PARK Instructor of Fisheries Physics, National Pusan Fisheries College	Improvement of fishing equipment and methods	6	7/59 - 12/59 Italy, Iceland, Germany, Canada
1959	Jai Yoon Hahm Staff Technician, Fishing Section, Inchon Regional Office of Marine Affairs, Ministry of Commerce and Industry	Whaling	3	3/61 - 6/61 Norway
1959	Young Hang KIM Asst. Fishing Master Purse Seine Fishing Boat Nam Yang Su San Co. Seoul	Purse Seine fishing	4	7/60 - 10/60 Iceland, Italy
1960	Choul Keun CHEE Chairman, Fisheries Committee FAO Korean Association Seoul	Fishery Treaty and Conservation of Sea Resources	5	1/61 - 7/61 UK, Germany, Denmark, Norway, Iceland, Canada, USA
1960	Kwan Chul SHIN Technician, Pohang Branch Central Fisheries Experimental Station, Seoul	Midwater and Danish trawler	5½	12/60 - 5/61 Denmark, Germany
1960	Jong Soo HUE Technician, Oceanography Investigation Section Central Fisheries Experimental Station	Oceanography and Survey	13	1/61 - 2/62 Australia
1962	Hack Kern SUH Assistant Technician Central Fisheries Experiment Station Pusan	Fish Finder Operation	7½	1/63 - 8/63 Japan, Norway, Iceland, UK, Germany
1962	Yung Chul YOO Assistant Scientist Office of Marine Affairs	Marine Bacteriology	12	4/63 - Japan

Year	Name and Occupation	Field of Training	Months	Period & Country of Training
1962	Jai Kil CHO Instructor, Processing and Food Technology Dept. Pusan Fisheries College	Fish Packing Methods and Inspection Services	7	2/63 - 9/63 Japan
1965	Byong Hi PARK	Electronic fishing aids	3	4/65 - 7/65 Japan
1965	Kee Won AHN	Marine engineering	2	8/65 - 10/65 Japan
1966	Suck Cho CHYUNG	Inland Fisheries Research Management and fish culture		USSR
LIBERIA				
1956	James F. COOPER Fishing Boat Captain	Fishing methods	11	3/56 - 2/57 Italy, UK, Denmark
1964	Mrs. Agnes COOPER-DENNIS	Fisheries Biology and Oceanography	1½	8/64 - 9/64 USSR
LIBYA				
1962	Mustafa Hafid BURKHIS Fisheries Officer Ports and Lights Dept. Tripoli	Fisheries	3	11/62 - 2/63 Malta
1962	Ahmed Sherif BARKAN Wharfage Dues Collector Ports and Lights Dept. Tripoli	Fisheries	3	11/62 - 2/63 Malta
MADAGASCAR				
1964	Florent Frederick RAHARIMANANA	Fish Technology	12	Canada
1965	Paul RANDRIAMBOLANORO	Inland Fisheries Research Management and Fish Culture	1	7/65 - 8/65 USSR
1966	Désiré Andriamilamina RAZAFINDRAKOTO	Fisheries Biology and Oceanography in connection with second Oceanographic Congress		USSR
1966	Mamy ANDRIANTSIFERANA	"		USSR

Year	Name and Occupation	Field of Training	Months	Period & Country of Training
MALAYA/MALAYSIA				
1964	Abu Bakar Othman MERICAN	Inland Fisheries	5½	5/64 - 11/64 India, Hong Kong (Taiwan), China Japan
1965	Phui Kong CHIN	Inland Fisheries Research Management and Fish Culture	1	7/65 - 8/65 USSR
1966	Ong Kah SIN	Fisheries Biology and Oceanography in connection with second Oceanographic Congress		USSR
1966	Abu Bakar Othman MERICAN	Inland Fisheries Research Management and Fish Culture		USSR
MALI REPUBLIC				
1962	Ali TIMBELEY Chief, Fisheries Section Mopti, Ministry of Agriculture and Forestry	Fish Processing	5½	4/63 - 9/63 Canada, Netherlands
MALTA				
1962	Joseph BARBARA Vocational Training Officer, Dept. of Fisheries Government of Malta	Fisheries Training and Research	7½	4/63 - 12/63 UK, Italy, Fr[illegible] Germany
MEXICO				
1955	Rafael VEGA Rivas Head, Office of Fish Production Control and Statistics, General Directorate of Fisheries	Fisheries Statistics and Administration	6½	1/56 - 3/56 Italy, Portugal, Spain, France
1956	Francisco OBREGON Fernández, Director, Rural Fish Farming Project, Banco	Inland Fisheries	3	4/57 - 7/57 Germany, Italy, Israel, India, Thailand, Singapore

Year	Name and Occupation	Field of Training	Months	Period & Country of Training
1962	Fidel GARCIA González Investigador "C" del Departamento de Piscicultura, Banco Nacional de Crédito Ejidal	Fish Culture	2	6/63 - 8/63 Israel
1966	Mauro CARDENAS	Fisheries Biology and Oceanography in connection with second Oceanographic Congress	1	USSR
1966	Mrs. María Luisa SEVILLA Hernández	Inland Fisheries Research Management and Fish Culture		USSR
NEPAL				
1965	Rohit Bahadur THAPA	Inland Fisheries	6	8/65 Germany, Yugoslavia, Israel, India
1966	Sansanka Narayan SARKAR	Inland Fisheries Research Management and Fish Culture		USSR
NETHERLANDS ANTILLES				
1955	Alberto FALCONI Inspector, Sanatation Department, Public Health Department, Govt. of Aruba	Fishing methods	2½	1/56 - 4/56 Jamaica
NIGERIA				
1966	Edward Ogieva BAYAGBONA	Fisheries Biology and Oceanography in connection with second Oceanographic Congress		USSR
PAKISTAN				
1964	Muhammad ARSHAD	Fisheries Biology and Oceanography	1½	8/64 - 9/64 USSR

Year	Name and Occupation	Field of Training	Months	Period and Country of Training
1966	Sayed Qadir MOHIUDDIN	Fisheries Biology and Oceanography in connection with second Oceanographic Congress		USSR
PANAMA				
1955	Juan L. OBARRIO Fisheries Assistant Min. of Agriculture and Commerce	Fisheries Biology	12	2/56 - 2/57 U.S.A.
PERU				
1962 UNSF	Sra.Doña Aurora CHIRINOS DE VILDOSO Biólogo, Instituto de Investigación de los Recursos Marinos	Fisheries Biology	5½	7/62 - 12/62 U.S.A.
1962 UNSF	Sra. Doña Obla PALIZA DE RAMIREZ Biólogo, Instituto de Investigación de los Recursos Marinos	Whale Research	12	11/62 - 11/63 UK, Norway, U.S.A. Canada
PHILIPPINES				
1959	Mrs. Priscilla Caces BORJA Ichthyologist Division of Fisheries Resources, Quezon City	Marine Biology	5½	3/60 - 9/60 UK, Germany, Thailand
1962	Mrs. Medina Nepomuceno DELMONDO Senior Fishery Technologist Bureau of Fisheries Diliman, Quezon City	Freshwater fisheries	6	8/63 - U.S.A.
1966	Mariano Manalo VILLAPANDO	Fish Marketing	12	Japan, Thailand, Hong Kong

Year	Name and Occupation	Field of Training	Months	Period and Country of Training
1966	Miss Elvira TAN	Fisheries Biology and Oceanography in connection with second Oceanographic Congress		USSR
1966	Manuel E. MEDINA	Inland fisheries research management and fish culture		USSR
POLAND				
1959	Kazimierz ZUKOWSKI Assistant Chief Fish Distribution Centre, Gdynia	Organization of fish processing plants	3	4/59 - 7/59 Germany
1959 UR	Kazimierz W. SKALSKI Chief, Central Office for Projects for Food Industries, Warsaw	Industrial sewage purification	4½	10/59 - 3/60 Germany, Austria
1960	Jerzy T. KUKUCZ Head, Department of Fish Technology Polytechnic Institute Gdansk	Fish technology	3	7/60 - 10/60 Germany, Netherlands, Belgium, France, UK, Austria
1960	Witold KALINOWSKI Chief, Development Division, Department of Fisheries, Ministry of Navigation and Water Economy	Fisheries	3½	7/60 - 10/60
1961	Edmund Simon KORDYL Chief, Technological Section, Sea Fisheries Institute, Gdynia	Fish Processing	3	1/62 - 4/62 UK, Norway, Denmark, Germany
1961	Stanislaw OKONSKI Chief of Technical Fisheries Section, Sea Fisheries Institute Gdynia	Fish Technology	3	1/62 - 4/62 UK, Netherlands, Sweden
1962	Feliks Mieczyslaw KIRSZTEIN, Deputy Director of "Dalmor" Deep Sea Fishing Cy., Gdynia	Fisheries Economics	5½	1/63 - 7/63 Italy, Greece, Norway

Year	Name and Occupation	Field of Training	Months	Period & Country of Training
1963	Pawel WOLNY	Intensifying fish culture in ponds	3	8/63 - 11/63 Israel
1964	Andrzej ORZYCKI	Fish freezing technology	3	7/64 - 11/64 Germany, Netherlands
1964	Jan ELWERTOWSKI	Catching resources of Patagonian Shelf	3	Argentina
1964	Stanislaw RYMASZEWSKI	Tuna fishing techniques	3	Japan, Kenya
1965	Antoni GURZEDA	Inland fisheries research management and fish culture	1	7/65 - 8/65 USSR
1965	Tadeusz SEKUDEWICZ	Construction work and operation of tuna catchers and fishing gear for tuna	3	Japan
1966	Josef WIKTOR	Fisheries biology and oceanography in connection with second Oceanographic Congress	1	USSR
1966	Stanislaw WOZNIAK	Fisheries Biology and oceanography in connection with second Oceanographic Congress		USSR
SIERRA LEONE				
1964	Thomas Jocelyn SHORUNKEH-SAWYERR	Fisheries biology and oceanography	1½	8/64 - 9/64 USSR
1966	Daniel Emanuel Babatunji CHAYTOR	Fisheries biology and oceanography in connection with second Oceanographic Congress	1	USSR
1966	Kenneth A. FERGUSSON	Inland fisheries research management and fish culture		USSR
1965	Mahmoud Ahmed MAHDI	Inland fisheries research management and fish culture	1	7/65 - 8/65 USSR

Year	Name and Occupation	Field of Training	Months	Period & Country of Training
SUDAN				
1958	Yousif I. MEDANI Hydrobiologist	Inland fisheries biology	22½	8/58 - 6/60 U.S.A.
1960	Mohamed Sied Ahmed EL AHMEDI Fish Farm Supervisor Department of Game and Fisheries, Ministry of Animal Resources, Khartoum	Pond culture	6	5/61 - 11/61 Uganda, Cameroun, Nigeria
1961	Abdel Aziz Mahmoud SALIH Officer in Charge of Marine Fisheries, Game and Fisheries Dept. Ministry of Animal Resources	Shell and Pearl fishery culture and management inshore and river fishery	7½	3/62 - 11/62 India, Pakistan, Germany, USSR
SYRIA				
1962	Kamal SALEH Fisheries Supervisor Ministry of Agriculture	Fisheries	12	7/63 - Germany
1964	John Joseph KAMBONA	Fisheries biology and oceanography	1½	8/64 - 9/64 USSR
THAILAND				
1951	Jinda THIEMMEDH Head, Department of Fisheries	Brackish water fish culture	1½	4/51 - 5/51 Indonesia
1952	Mek BOONPRAHM Fish Culture Officer	Fish Culture	1½	5/52 - 6/52 Indonesia
1952	Ariya SIDTHIMUNKA	Fish Culture	1½	5/52 - 6/52 Indonesia
1952	Umpol PONGSUWANA	Fish Culture	1½	5/52 - 6/52 Indonesia

Year	Name and Occupation	Field of Training	Months	Period & Country of Training
1959	Bung-orn KASEMSARN (Miss) Junior Chemist, Technological Laboratory Dept. of Fisheries, Bangkok	Fishery Technology	11	10/59 - 8/60 UK, Canada
1961	Prasit AGURU Chief, Chaophya Fisheries Station, Fisheries Dept., Ministry of Agriculture, Bangkok	Fish Culture	3½	11/61 - 2/62 Malaya
1961	Suchit BHINYOYING Fisheries Research Officer Fisheries Dept., Ministry of Agriculture, Bangkok	Fish Culture	3½	11/61 - 2/62 Malaya
1963	Suchit BHINYOYING	Inland Fisheries	8½	5/64 - 8/65 India, USA
1964	Tong NADGRATOK	Fishing Boat	12	5/64 - 5/65 Canada, USA, Hawaii, Japan, Hong Kong
1964	Arporna SRIBHIBHADH	Fisheries Biology and Oceanography	1½	8/64 - 9/64 USSR
1965	Jinda THIEMMEDH	Inland Fisheries Research Management and Fish Culture	1	7/65 - 8/65 USSR
1965	Dumrong SILAPACHAI	Inland Fisheries	12	USA
1966	Chertchai AMATAYAKUL	Inland Fisheries Research Management and Fish Culture		USSR
TOGO				
1962	Body Laté Frédéric LAWSON Chief de Posts Forestier de Tététou, Ministère de l'Agriculture, de l'Elevage des Eaux et Forêts, Lomé	Inland Fisheries	7	3/63 - 10/63 Republic of Camerouns, France Uganda
1962	Sylvestre AGBOTON Fisheries Officer Service de l'Elevage Lomé	Sea Fisheries	5½	9/62 - 5/63 Senegal, Ivory Coast, France, Nigeria

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1964	Abdou Karim BOUKARI	Fisheries Biology and Oceanography	1½	8/64 - 9/64 USSR
TUNISIA				
1964	Abderrazak AZOUZ	Fisheries Biology and Oceanography	1½	USSR
1964	Abderrazak AZOUZ	Shellfish	9	11/64 - 8/65 France
1966	Founoun CHAKROUN	Fisheries Biology and Oceanography in connection with second Oceanography Congress	1	USSR
TURKEY				
1953	Orhan CIRAGAN Industrial Engineer Meat and Fish Office Ministry of Economics and Commerce	Fish oil and fish meal processing	7½	12/53 - 7/54 Germany, Norway, Denmark
1954	Cihat RENDA Manager, Organisation and Research Department, Meat and Fish Office	Fish marketing and other economic aspects of Fisheries	6½	9/54 - 3/55 Denmark, Norway, UK, Netherlands, Germany, Italy
1954	Fikri Erdogan AKYUZ Counterpart Officer of FAO, Expert in Fisheries Biology	Fisheries Biology	8½	2/54 - 10/54 UK, Yugoslavia
1954	Necati OZISIK . Counterpart Assistant of FAO, Fisheries Technologist Government Meat and Fish Organization	Handling, refrigeration and transport of fish	6	3/54 - 9/54 Denmark, Sweden Norway, Germany
1955	Ilham ARTUZ Fisheries Biologist	Fisheries Biology	6	9/55 - 3/56 Denmark, Portugal

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TURKEY				
1956	Muzaffer KOCABAL Fishery Skipper, Fish and Meat Office	Practical fishing	6	2/56 - 8/56 Norway, Denmark
1956	Abdurrahman IYIGUNGOR Counterpart to FAO Fisheries Engineers Meat and Fish Office	Practical fishing	6½	2/56 - 8/56 Norway, Denmark
1956	Haydar AYTEKLIN Economist, Fisheries Dept. Meat and Fish Office	Fishery economics	6	9/56 - 4/57 Netherlands, Belgium, Fran
1957	Dogan AKAGUNDUZ Expert in Organization and Management, Meat and Fish Office	Fish freezing and cold storage	6	7/57 - 1/58 Canada, USA
1957	Miss Necla GURTURK Chief, Plankton Laboratory Fisheries Research Centre	Application of plankton research to fisheries problems	7	4/58 - 11/58 UK, Denmark, Italy
1957	Abdul UGUR Chief, Cold Storage Technological and Bacteriological Laboratory Meat and Fish Office	Fish technology	6	4/58 - 10/58 Canada
1957	Coskun TEKELI Counterpart Assistant to FAO Fishing Experts Fisheries Research Centre Meat and Fish Office	Fishing methods	8	7/57 - 3/58 Iceland, Denma UK, Italy, Norway
1957	Mustafa OZERDEM Chief, Fishing Boat Section Meat and Fish Office	Boat building	6	5/58 - 11/58 USA, Canada, Italy
1959	Mrs. Bodia H. TAMERI Assistant Director Fisheries Research Centre Meat and Fish Office Istanbul	Fishery Research	6½	2/61 - 9/61 Canada, USA
1965	Hassan Fethi AKSIRAY	Inland Fisheries Research Management and Fish Culture	1	7/65 - 8/65
1966	Mehmet Ilham ARTUZ	Fisheries Biology and Oceanography in connection with 2nd Oceanographic Congress	1	USSR

Year	Name and Occupation	Field of Training	Months	Period & Count of Training
U.A.R. (EGYPT)				
1957	Mohamed Hassan Tahver LASHIN Head, Fisheries Statistical Section, Ministry of Agriculture	Fisheries Statistics	9	5/58 - 2/59 India, Japan
1957	Abdel Khalek El Sayed INAM Superintendent of Serow Fish Farm	Fish Culture	9½	2/58 - 11/58 Germany, India Pakistan, Thailand, Indonesi
1957	Khattab Mohamed HASSANEIN Senior Master in Mathematics Victory College, Maadi	Fishery Statistics	18	6/58 - USA, Canada
1958	Maher Iskander FALTAS Branch Fisheries Statistics Division of Statistics and Economics, Ministry of Agriculture	Fisheries Statistics	9	7/59 - India
U.A.R. (SYRIA)				
1957	Mohammed A. NASSAN Agricultural Engineer El Ghab Project Administration	Fish Culture	13½	9/58 - 11/59 Belgium, Franc
U.A.R.				
1961	Moustafa Mahmoud AREF Lecturer in Food Technology University of Alexandria	Marine Products and their Preservation	9	1/61 - 10/61 UK, Germany, Denmark, Yugoslavia, Italy
1964	Anwar Abdel ALEEM	Fisheries Biology and Oceanography	1½	8/64 - 9/64 USSR
1966	Mohamed M. EL HAWARY	Fisheries Biology and Oceanography in connection with 2nd Oceanographic Congress		USSR
1966	Monir Mohamed Hilal RIZK	Inland Fisheries Research Management and Fish Culture		USSR

Year	Name and Occupation	Field of Training	Months	Period & Country of Training
YEMEN				
1964	Saleh Abdula A'YASH	Inland Fish Culture	12	4/65
1964	Abdula Ahmed KUBAN	Marine Fisheries Biology	12	5/65
YUGOSLAVIA				
1952	Dinko MOROVIC Oceanography and Fisheries Institute, Split	Inland Fisheries Biology	3	1/53 - 4/53 Italy
1953	Ratko MIKULIC Chief Technologist, Fish Industry Organization "Mirna", Prduzeceza Preradu Ribe, Rijeka	Fishery Technology	4½	7/53 - 11/53 Denmark, Sweden, Norway, Germany, Belgium, Morocco, Algeria, France
1954	Mrs. Ida MIHALJOVIC-BADUBER Assistant, Fisheries Institute	Inland Fish Breeding and disease control	6	9/54 - 2/55 Germany
1954	Hinko LISAC Engineer, "Mardesio" Fish Factory, Zadar	Fish Processing	4	9/54 - 1/55 Denmark, Germany
1954	Josko SIMONCIC Chief, Technical Economic Law Branch, Economic Council Koper	Fish Handling and Refrigeration	3	7/54 - 12/54 Algeria, Morocco Denmark
1954	Ivo J. Tilic Chief Economist, Oceanographic and Fisheries Institute, Split	Fishery Economics	5½	4/55 - 9/55 Denmark, Netherlands, Germany, Norway
1955	Sime I. ZUPANOVIC In charge of Statistics Division, Institute of Oceanography and Fisheries, Split	Fishery Economics	6	10/55 - 4/56 Denmark, UK, France, Greece, Turkey, Lebanon, UAR (Syria and Egypt), Israel
1955	Fabjan P. GRUBISIC Oceanography and Fisheries Institute, Split	Fishery Engineering (trawling)	5	7/55 - 12/55 Italy, Denmark

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1956	Kresimir SEPIC Institute for Improvement of Fishing Industry, Zadar	Fish Refrigeration	4½	7/56 - 12/56 Denmark, Germany, Netherlands, UK, France
1956	Negojsa I. RANKOVIC Assistant Ichthyologist Fishery Institute of People's Republic of Serbia	Improvement of Inland Fisheries and Fishery in lakes and accumulation basins	5½	7/56 - 12/56 Germany
1957	Vladimir LEPETIC Director, Agricultural Station, Dubrovnik Dept. Association of Agricultural Stations, Zagreb.	Fishery Biology	6	9/57 - 3/58 Netherlands, Norway, Italy
1958	Emil S. KAPAC Officer, Fishery Institute People's Republic of Macedonia, Skopje.	Production and Catching of inland fish	6½	4/59 - 10/59 USSR
1958	Miljenko GRUBELIC Officer, Secretariat of Agriculture, Government of Groatia, Zagreb	Administration of sea fisheries	3½	10/58 - 1/58 Italy
1961	Djordjije DRECUN Director of Fishery Station Dept. of Agriculture Montenegro	Fisheries	1	7/62 - 8/62 Italy
1961	Ivan MARETIC Technical Director "Jugoatlantik" Fishing Enterprise, Pula	Fisheries	3	7/62 - 9/62 Italy
1962	Anton PERKOVIC Assistant Chief, Technical Fishing Division, "Jugoatlantik", Pula	Processing, Handling and Storage of Fish	2	7/62 - 8/62 Italy
1962	Atilic TOMAC Chief, Technical Dept. "Skiljka" Fishing Enterprise, Porec	Processing, Handling and Storage of Fish	2	7/62 - 8/62 Italy

Year	Name and Occupation	Field of Training	Months	Period and Country of Training
1962	Pero SARDELIC Oceanographer and Fishery Expert, Institute for Oceanography, Split	Processing, Handling and Storage of Fish	3	7/63 - Japan
1962	Nikola PETROVSKI Researcher, Fishery Institute of Macedonia Skopje	Sea Fishing, Catering, Handling, Processing and Storage of Fish	2	5/63 - 7/63 USSR
1962	Vladimir SESTAK Technical Collaborator Pisciculture Institute Sarajevo	Sea Fishing, Catering, Handling, Processing and Storage of Fish	2	5/63 - 7/63 USSR
1962	Tomas SEKULOVIC Chief, Fishing Techniques Section, Fishery Station Titograd	Sea Fishing, Catering, Handling, Processing and Storage of Fish	2	5/63 - 7/63 USSR
1962	Radivoj ILKIN Production Manager "Saran" Production and Fish Trading Enterprise Petrovaradia	Sea Fishing, Catering, Handling, Processing and Storage of Fish	2	5/63 - 7/63 USSR
1962	Branko BESEDNIK Director of Fisheries of P.R. Croatia	Sea Fishing, Catering, Handling, Processing and Storage of Fish	2	5/63 - 7/63 USSR
1962	Milutin RASPOPOVIC Director, Fishery Section of Hunting Reserves	Sea Fishing, Catering, Handling, Processing and Storage of Fish	2	5/63 - 7/63 USSR
1964	Ivo DUNDOV	Deep Sea Fishing	6	Poland-Italy
1964	Ivo Liberata KACIC	Fisheries Biology and Oceanography	1½	8/64 - 9/64 USSR
1965	Miss Vera MITROVIC	Inland Fisheries Research Management and Fish Culture	1	USSR
1966	Miss Vera MITROVIC	Toxicity in River Waste Waters	6	UK
1966	Miss Tamara VUCETIC	Fisheries Biology and Oceanography in connection with 2nd Oceanographic Congress	1	USSR

Year	Name and Occupation	Field of Training	Months	Period and Country of Training
1966	Miss Draga JANKOVIC	Inland Fisheries Research Management and Fish Culture		USSR
1966	Ljubica DEBELJAK	" "		USSR
ZAMBIA				
1966	Aaron Bayayi Eddie MABAYE	Inland Fisheries Research Management and Fish Culture		USSR
ZANZIBAR				
1962	Muhammed Ahmed MUHAMMED Fisheries Assistant Fisheries Section, Dept. of Agriculture	Fisheries	18	1/63 India
1962	Kenneth Frederick KING Fisheries Development Officer, Department of Agriculture	Fishing Methods for Tuna	½	3/63 - 3/63 Ghana

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

CONSEIL INDO-PACIFIQUE
DES PECHES

CONSEJO DEL INDO-PACIFICO
PARA PESQUERIAS

I N D O - P A C I F I C F I S H E R I E S C O U N C I L

F.A.O. Regional Office for Asia and the Far East
Bangkok, Thailand

12th Session, Honolulu, Hawaii, U.S.A.
3rd - 17th October, 1966

IPFC/C66/INC 1 (Rev.1)

IPFC 12TH SESSION

PROVISIONAL PROGRAMME

1st October	Sat.		Registration and Distribution of Documents
2nd "	Sun.		Free
3rd "	Mon.	1030-1200	Official Opening Ceremony, Kennedy Theatre
		1400-1630	Plenary Meeting, Jefferson Hall
		1800-2000	U.S. Official Reception
4th "	Tues.	0900-1200	Plenary Meeting
		1330-1730	Technical Committee Meetings
5th "	Wed.	0900-1200	Symposium
		1330-1730	"
		1930-2230	"
6th "	Thurs.	*0900-1200	Symposium
		1330-1630	"
		1630-1730	Visit Bureau Commercial Fisheries Laboratory
7th "	Fri.	0900-1000	Plenary Meeting
		1000-1200	Joint IPFC/IOC Meeting Technical Committee II Meeting
		1330-1730	Joint IPFC/IOC Meeting Technical Committee II Meeting
8th "	Sat.	0900-1000	Plenary Meeting
		1000-1200	Joint IPFC/IOC Meeting Technical Committee II Meeting
		1330-1700	Visit Sea Life Park

* Note: Should the Symposium discussion be completed ahead of the time scheduled above, arrangements will be made to convene the Technical Committees.

9th	October	Sun.		Free
10th	"	Mon.	0900-1000	Plenary Meeting
			1000-1200	Joint IPFC/IOC Meeting Technical Committee II Meeting
			1330-1730	Joint IPFC/IOC Meeting Technical Committee II Meeting
11th	"	Tues.	0630-0715	Visit Fresh Fish Market
			0900-1200	Joint IPFC/IOC Meeting Technical Committee II Meeting
			1330-1730	Technical Committee Meetings
12th	"	Wed.	0900-1000	Plenary Meeting
			1000-1200	Technical Committee Meetings
			1330-1730	Technical Committee Meetings
13th	"	Thurs.	0900-1030	Plenary Meeting
			1030-1200	Technical Committee Meetings
			1330-1730	Technical Committee Meetings
14th	"	Fri.	0900-1200	Technical Committee Meetings
			1330-1730	Joint Committee Meetings
15th	"	Sat.	0800-1200	Joint Committee and Resolutions
			1330-1530	Kewalo Basin, H.F.& G. Shrimp & Fish Culture Station
16th	"	Sun.	0800-1500	Demonstration Cruises on BCF Research Vessels CHARLES H. GILBERT and TOWNSEND CROMWELL
17th	"	Mon.	0900-1200	Adoption of Report and Closing Plenary Session

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

CONSEIL INDO-PACIFIQUE DES PECHES

COMISION DEL INDO-PACIFICO PARA PESQUERIAS

I N D O - P A C I F I C F I S H E R I E S C O U N C I L
F.A.O. Regional Office for Asia and the Far East
Bangkok, Thailand

12th Session, Honolulu, Hawaii, U.S.A.
3-17 October 1966

IPFC/C66/INC 1 (FR)

Douzième Session
du
Conseil Indo-Pacifique des Pêches

PROGRAMME PROVISOIRE

Samedi	le 1er	octobre	Inscription des délégués et destibution des documents	
Dimanche	le 2	"	Libre	
Lundi	le 3	"	1030-1200	Cérémonie inaugurale officielle, Kennedy Theatre
			1400-1730	Séance plénière, Jefferson Hall
Mardi	le 4	"	0900-1200	Séance plénière
			1400-1730	Réunions des Comités techniques
Mercredi	le 5	"	0900-1200	Symposium
			1400-1730	"
			1930-2230	"
Jeudi	le 6	"	0900-1200	Symposium
			1400-1730	"
Vendredi	le 7	"	0900-1200	Visite au laboratoire du "Bureau of Commercial Fisheries"
			1400-1730	Visite au "Kewalo Basin Facility" et aux Stations piscicoles et d'élevage des crevettes du Service des pêches et de la chasse de Hawai (Hawaii Fish & Game)

Note: Si le débat du Symposium se termine avant le temps fixé ci-dessus, des dispositions seront prises pour convoquer les Comités techniques.

Samedi	le 8 octobre	0900-1000	Séance plénière
		1000-1200	Réunions des Comités techniques
		après-midi	Libre (visite au "Sea Life Park" et à l'Aquarium de Waikiki)
Dimanche	le 9 "		Libre
Lundi	le 10 "	0900-1000	Séance plénière
		1000-1200	Réunion mixte IPFC/IOC
			" du Comité technique II
		1400-1730	" mixte IPFC/IOC
			" du Comité technique II
Mardi	le 11 "	0630-0800	Visite au Marché au poisson frais
		0900-1200	Réunion mixte IPFC/IOC
			" du Comité technique II
		1400-1730	" mixte IPFC/IOC
			" du Comité technique II
Mercredi	le 12 "	0900-1000	Séance plénière
		1000-1200	Réunions des Comités techniques
		1400-1730	" " " "
Jeudi	le 13 "	0900-1030	Séance plénière
		1030-1200	Réunions des Comités techniques
		1400-1730	" " " "
Vendredi	le 14 "	0900-1200	Réunions des Comités techniques
		1400-1730	" mixtes des Comités
Samedi	le 15 "	0900-1030	Réunion mixte des Comités et résolutions
		1030-1200	Visite à la conserverie de thon
		après-midi	Libre
Dimanche	le 16 "	Croisières de démonstration sur les bateaux du BCF pour les recherches: le CHARLES H. GILBERT et le TOWNSEND CROMWELL.	
Lundi	le 17 "	0900-1200	Adoption du Rapport et Séance plénière de clôture.

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

CONSEIL INDO-PACIFIQUE
DES PECHES

CONSEJO DEL INDO-PACIFICO
PARA PESQUERIAS

I N D O - P A C I F I C F I S H E R I E S C O U N C I L

F.A.O. Regional Office for Asia and the Far East
Bangkok, Thailand

12th Session, Honolulu, Hawaii, U.S.A.
3rd - 17th October 1966

IPFC/C66/INC 3

PROVISIONAL LIST OF DOCUMENTS

WORKING PAPERS:

IPFC/C66/WP	1	Provisional Agenda
	1(Fr)	Ordre du jour provisoire
	2	Report of the Executive Committee
	3	Status of the Industry
	4	Summary of Resolutions and Recommendations
	5	Unit stocks of shrimps and prawns in the IPFC Region and Unit Fisheries exploiting them
	6	Unit Fisheries of Japan
	7	The Tropical Fish Culture Research Institute, Batu Berendum, Malacca, Malaysia
	8	Intersession Report (1965-66) of Technical Committee II (Technology)
	9	Report of the 1st Meeting of the Working Party on Fresh (Wet) Fish Preservation, Bangkok, Thailand, 5-8 July 1966
	10	Reports of IPFC Observers to International Meetings, February 1965 - June 1966
	11	Report of the IPFC Working Party on Trawling, Bangkok, Thailand, 27-30 June 1966

IPFC/C66/WP	12	Technical Committee II (Technology) Provisional Agenda - Annotations to the Agenda
	13	The possible scope of the Fisheries Census suggested by the Eleventh Session of IPFC. Formation of a Frame for the Fisheries Census
	14	Fisheries Statistics in the Countries in Asia and the Far East.
	15	Unit Fisheries of Thailand (Marine)
	16	Preparation of illustration of the commercially important animals in Asia and the Far East
	17	Approximate inventory of trawlers in the Indo-Pacific Area
	18	Intersession Report (1964-66) of Technical Committee I (submitted to the 12th Session of the Indo-Pacific Fisheries Council).
	19	Studies on Tuna Taxonomy
	20	11th Pacific Science Congress, Tokyo, August-September, 1966. Resolution of Interest to the Indo-Pacific Fisheries Council

INCIDENTAL PAPERS:

IPFC/C66/ INC	1	Provisional Programme
	1(Fr)	Programme Provisoire
	1(Rev. 1)	Provisional Programme
	1(Fr) (Rev.1)	Programme Provisoire
	3	Provisional List of Documents
	3	Provisional List of Delegates and Observers
	4	Bus Schedules
	5	Order of the Day. Monday, 3rd October

TECHNICAL PAPERS:

			Subject
IPFC/C66/TECH	1	A contribution to the study of the growth of members of the Genus Stolephorus Lacepede in Singapore Straits. by Tham Ah Kow	Marine Biology
	2	On the Possibilities for further Development of the South East Asian Fisheries until the year 2000. by K. Tiews	Fisheries Development
	3	Preliminary studies on the keeping quality of fish sausage. by S.V. Bersamin and N.G. Macalincag	Food Technology
	4	Preliminary studies on Temperate Assessment of Fish at all stages in the distribution chain. by S.V. Bersamin and E.P. Tongco	Food Technology
	5	The artificial inducement of spawning in the Grass Carp, Ctenopharyngodon idella Val. by C.F. Hickling	Fish Culture
	6	Preliminary review of the more important fisheries of the Western South Pacific and the Eastern South Indian Ocean. by B.B. Jones	Resources
	7	Preliminary results of trawling investigations off Penang. by D. Pathansali, K.S. Ong, S.S. Latiff and J.L. Carvalho	Exploratory Fishing
	8	Protein substitutes for animal feeds from seaweed. by S.V. Bersamin, R.B. Banania and R. Rustia	Seaweeds
	9	Studies on the possible sources of microbial contamination of processed fishery products. by T.S.G. Iyer, D.R. Choudhuri and V.K. Pillai	Food Technology
	10	A Note on the possibilities on manufacture of Bombay paste. by P. Vasudeva Prabhu and R. Venkataraman	Food Technology

			Subject
IPFC/C66/TECH	11	Ice Storage Studies on Indian Pomfrets. by R. Venkataraman, P. Vasudeva Prabhu and D.J. Mankad	Food Technology
	12	Studies on "Doma" - Quality of the Doma meal from fresh fish to that of room temperature spoiled ones. by D. Ramananda Rao	Food Technology
	13	Belly Depth Studies for Shrimp Trawls. by H.N. Mhalathkar and H. Krishna Iyer	Fishing Gear
	14	Utilization of Sardine Oil for the Industrial purposes - Part I - Factice for use as a filler in rubber compounding. by M.N.N. Kaimal and P. Madhvan	Food Technology
	15	Observations on the Gonad Maturity Stages of Female Rastrelliger kanagurta Cuvier. by D. Pathansali	Marine Biology
	16	A note on a species of Pneumatophorus Jordan and Starks, found in Malaysian waters and the problem raised. by D. Pathansali	Marine Biology
	17	Etude des "Trey Plathou Chamhoy" (les Poissons Bouillis). by Suon Saroeung	Food Technology
	18	An assessment of marine prawn fishery resources of Kanyakumari District South West Coast of India. by M.J. George and K.H. Mohamed	Resources
	19	Fluctuations in the prawn landings in Chilka Lake. by M. Subrahmanyam	Resources
	20	Observations on efficacy of Grass Carp, Ctenopharyngodon idella (Val.) in controlling and utilizing aquatic weeds in ponds in India. by S.B. Singh, K.K. Sukumaran, K.K. Pillai and P.C. Chakrabarti	Fish Culture
	21	On the induced spawning of Pla Sawai, Pangasius sutchi. by S.W. Ling, A. Sithimunka and S. Pinyoying	Fish Culture

			Subject
IPFC/C66/TECH	22	Distribution and migration of albacore (Thannus alalunga) in the Pacific Ocean. by T. Otsu and H.O. Yoshida	Marine Biology
	23	Distribution of juveniles of four species of tunas in the Pacific Ocean. by B.E. Higgins	Marine Biology
	24	Notes on the maturation of tunas in the Indian Ocean. by S. Kikawa and M.G. Ferraro	Marine Biology
	25	Pelagic fishes caught on R/V Anton Brunn cruises 2 and 5 (International Indian Ocean Expedition). by R.S. Shomura	Exploratory Fishing
	26	A continuous-transmission, frequency-moderlated sonar for the study of pelagic fish. by H.S.H. Yuen	Fishing Gear
	27		
	28	A Report on Handling and Marketing of Fish in Pakistan. by S.A. Jaleel and S.A. Kabir	Food Technology
	29	A Report on the Collection and compilation of Fisheries Statistics of Pakistan. by S.A. Jaleel and S.M.A. Salam Kazmi	Statistics
	30	Socio-economic activities for the uplift of Fishermen's Community of Pakistan. by S.A. Jaleel and S.M.A. Salam Kazmi	Socio-economics
	31	Estimates of the growth of skipjack tuna (Katsuwonus pelamis) in the Hawaiian Islands. by B.J. Rothschild	Marine Biology
	32	Outline for the initial development of fish culture in ponds in emerging countries. by J.J. Schuurman	Fish Culture

		Subject
IPFC/C66/TECH 33	A preliminary Report on the Commercial Sea Fisheries of the Western Sector of the IPFC. by S. Jones	Resources

SYMPOSIUM PAPERS: "Fisheries Education"

IPFC/C66/SYM 1 The Fishery Schools of Taiwan.
by Liu, Fah Hsuen

2 The Training of Fisheries Administrative Officers in South East Asia.
by Tham Ah Kow

3 Fisheries Extension Service in Japan.
by the Technological Research Section, Fisheries Agency, Japan (Translated by Y. Miyake)

4 Fisheries Education in Taiwan.
by T.P. Chen

5 The Training of Fisheries Extension Staff.
by L.C. Devambez

6 Fisheries Education in the Philippines - University level.
by A.S. Timbol and N.A. Pidlaoan

7 Fishermen's Education in Hokkaido.
by K. Oshima

8 History of Misaki International Fisheries Training Centre.
by Overseas Technical Cooperation Agency, Tokyo, Japan

9 Fishery Education in Senior High Schools.
by S. Danno

10 Fishery Education in Universities.
by the Fisheries Agency, Tokyo, Japan

11 Education of the Fishermen's Cooperative Association School.
by Y. Murakami

12 Training of Fishermen.
by Fisheries Agency, Tokyo, Japan

13 An extension program in the Western Australian Crayfishery.
by H.S. Hawkins and R.R. Ingpen

14 History of Fisheries Education in Japan.
by N. Fujinami

15 Fisheries Education in Japan.
by N. Fujinami

IPFC/C66/SYM

16 Fisheries Training Courses in Australia.
by C.A. Mobbs

17 Compiling a Fisheries Officers' Field Handbook.
by P.C. Pownall

18 The Training of Fishermen in Hong Kong.
by The Agriculture & Fisheries Department, Hong Kong

19 The Hawaiian Training Program for Trust Territory Fishermen.
by T.S. Hida

20 Audiovisual Aids in Adult Education.
by H. Philp

21 The Making and Training of Fishermen in Isreal.
by R. Ruppin

22 Training program for skipjack tuna fishermen in Hawaii.
by T.S. Hida

23 Fisheries Training in the United Kingdom for overseas posts.
by C.F. Hickling

24 The Selection and Training of Instructors.
by G.J. Hall

25 Teaching Fish Technology - Organization of Training Courses in Fish Handling and Processing.
by J.J. Waterman

26 Syllabus for post graduate students and Departmental Officers at Fisheries Training Institute, Kakinada. 2, Andhra Pradesh India.

27 The Development of Fisheries Training in the United Kingdom.
by D.N.F. Hall

28 How to develop latent fishing skills for Today's Industries.
by A.M. Rapson

29 Fisheries Education and Training in growth and development programs.
by G.M. Gerhardsen

30 General considerations in manpower planning and their application to drawing up fisheries development programs.
by R. Hamtisch

31 Fisheries Education at the University level in Thailand, its background, development and problems.
by J. Thiemmedh

IPFC/C66/SYM 32 Activities of FAO Working Party on Direct and speedier estimation of fish abundance with special reference to instruction and training in techniques.
by B.B. Parrish

33 Current American Literature in the Marine Sciences.
by Hazel S. Nishimura

34 A two-year associate degree in commercial fisheries at the University of Rhode Island.
by J.W. Cobble, A. Holmsen and D.F. Shontz

35 Central Institute of Fisheries Operatives Ernakulam, India.
by its staff

CONTRIBUTED PUBLICATIONS: Note: The following publications have been made available in limited supply to the Council. These have been distributed as widely as possible. When numbers of copies have been small distribution has been limited to Heads of Delegations only.

IPFC/C66/CP 1 Mechanization of small fishing craft.

Section I - Outboards
II - Inboard engines in open craft
III - Inboard engines in decked craft
IV - Mechanization of small fishing craft.
Fishing News(Books) Ltd., London.

2 Establishment, Structure, Functions and activities of International Fisheries Bodies. I. Indo-Pacific Fisheries Council. ACMRR.

3 A world list of experts concerned with the study of the biology and culture of shrimps and prawns, by H. Rosa. FAO Fish. Tech. Pap., 44. (Dist. Restricted). FAO Rome, 1965.

4 Fishermen's Organizations and the Regulation of Fish prices in Sweden. FAO Fish Study 4. FAO Rome, 1957.

5 Governmental Services to the Sea-fish Industry of Great Britain. FAO Fish Study 5. FAO Rome, 1957.

6 Sea-fish Marketing in the Federal Republic of Germany. FAO Fish Study 6. FAO Rome, 1957.

7 Fisheries as a Profession (Career Guide Brochure). American Fisheries Society, Washington D.C., U.S.A.

8 Western Australian Crayfish. Maintaining the Catch. Pamphlet, Dept. Fish and Fauna, Perth, Western Australia, 1965.

9 Escape-Gaps in Graypots. Pamphlet, Dept. Fish and Fauna, Perth, Western Australia, 1965.

10 Fisheries Education and Training in Asia and the Far East with particular reference to higher and intermediate education. Paper, First FAO Regional Seminar on Agricultural Education for Asia and the Far East, Bangkok, Thailand, 18-28 Oct. 1965 in cooperation with UNESCO and ILO, Mimeo, 8 pp.

11 Report of the FAO Symposium on the significance of Fundamental Research in the Utilization of Fish, Husum, Germany, 26-30 May 1964.

IPFC/C66/CP

12 Mechanization of small fishing craft under Revolving Fund Arrangements in Developing Countries by A. J. Thomas.

(Mechanization des petits bateaux de peche dans les pays en voie de developpment par un systeme de financement fonde sur la creation de fonds de roulement par A J Thomas)

13 Handling and Care of Fish at Sea. White Fish Authority Conference on the Handling and Care of Fish at Sea, Olympia, London, May 31 - June 2, 1965.

14 Preliminary List of Institutions, Organizations etc. giving Fishery Training in the Indo-Pacific Area by A. Soulier. Fish. Dept., FAO, FERO, Bangkok, Mimeo, 34 pp.

15 FAO Catalogue of Fishing Gear Designs, Fishing Gear Section Fisheries Division, FAO Rome, 1965.

16 Seminar and Study Tour on Fishermen's Training, Moscow, U.S.S.R., 26 August - 17 September 1965. FAO/TA Report No. 2196. 24 pp.

17 The Introduction of aquatic animals into Hawaiian waters by V. E. Brock. Reprint. Internationale Revue der Gesamten Hydrobiologie, 1960 45(4): 468-480.

18 The fresh-water fishes of Singapore. Zool. Verhand. Leiden, 78: 1-68, pls. 8,1 fig., 1966.

19 The fresh-water food fishes of Malaya. I - Scleropages formosus (Mull. & Schl.) Fed. Mus. J., 9: 80-83, pls. 29, 1965.

20 Contributions of the Fisheries Division to the Economic Development of Malaysia by Soong Min Kong. Paper, Joint Annual Conference of Ministry of Agriculture and Cooperatives, 21-23 February 1966, Kuala Lumpur, Malaysia. Mimeo, 15 pp., 4 App.

21 Vocational training of fishermen. Preparatory technical conference of fishermen's questions, Geneva, October 1965. 2nd item on agenda., International Labor Organization Report 11., 112 pp., Annex, 10 pp.

22 Summary of conclusions and recommendations on Agricultural Education and Training. Reproduced, Report on the First FAO Regional Seminar of Agricultural Education for Asia and the Far East, Bangkok, Thailand, 18-28 October 1965 in cooperation with UNESCO and ILO. Mimeo, 8 pp.

23 List of FAO Training Centres and Seminars Concerning Fisheries, 1950-1965. FAO Dept. Fish Rome. Mimeo 3 pp.

IPFC/C66/CP

24 Fellowships, Scholarships, Study and Travel Grants in the field of fisheries awarded by FAO under its Expanded Technical Assistance Program 1951-1966. FAO Dept. Fish Rome. Mimeo 32 pp.

25 Fisheries Statistical Survey in General by T. Yamamoto. FAO FERO, Bangkok. Mimeo, 43 pp.

26 Guide for Curators of Brachyuran Collections in Southeast Asia by R. Serene. UNESCO Regional Centre for Science and Technology for Southeast Asia, Applied Scientific Research Corporation of Thailand, Bangkok. 1965, 65 pp.

27 Classification of Fishes Both Recent and Fossil by L.S. Berg. Reprint, Document Reproduction Unit, Thai National Documentation Centre, Applied Scientific Research Corporation of Thailand, Bangkok. 1965 34 pp.

28 Record of the Preparatory Technical Conference on Fishermen's Questions, Geneva, 18-28 October 1965. 8th Item on Agenda. GB 163/8/30. 163rd session., International Labour Organization, Geneva, 16-19 November 1965. Mimeo 14 pp. 3 Apps.

29 Films on Oceanography (First revision) Catalog Series. National Oceanographic Data Center. Publication C-4. 1964

30 World Directory of Hydrobiological and Fisheries Institutions. R.W. Hiatt (ed.) American Institute of Biological Sciences, Washington, D.C. 1963 320 pp.

31 Index of Hydrobiological and Fisheries Institutions with Training Programs prepared by FAO Fishery Resources and Exploitation Division, Rome. FAO Fish. Circ. 23 (Dist. Restr.) 65 pp.

32 Text of the Convention concerning Fisherman's Certificates of competency, Submitted by the Drafting Committee. Conference internationale du Travail Compte Rendu Provisoire, cinquantieme Session, Geneve, 1966, No. 32,6 pp.

33 Text of Recommendation concerning the vocational training of fishermen, submitted by the Drafting Committee. International Labour Conference Provisional Record, Fiftieth Session, Geneva, 1966 No. 34 8pp.

An Analysis of Demersal Catches taken from the experimental trawling operations in the Gulf of Thailand by S. Ruamragsa [illegible] P. Isarankura. Contribution No. 3, Department of [illegible], Bangkok, Thailand, May 1965, 51 pp., 2 Apps.

Bottom Fish Resources Investigation in the Gulf of Thailand and an outlook on further possibilities to develop the Marine Fisheries in South East Asia by K. Tiews. [illegible]. Reprint, [illegible].

IPFC/C66/CP 36 Size composition sex ratio and spawning periods of greater Lizard fish, Saurida tumbil Block, in the Gulf of Thailand by W. Chomdej. Contribution No. 5, Department of Fisheries, Bangkok, Thailand, 1966, 21 pp.

37 The German Fisheries Mission to Thailand (2nd Project phase (1962-1964)) by K. Tiews. Veroffentlichungen des Instituts fur Kusten-und Binnerfischerei, Hamburg, No. 36/1965, 28 pp., 9 Ill., 1 table.

38 Prawn Otter Trawl Fishery in Sabah, Malaysia by Chin Phui Kong and Goh Siang Keng. Preprint, Dept. of Fisheries, Malaysia. 21 pp. 3 App.

REFERENCE MATERIAL: Note: Due to copies being insufficient for distribution, the following publications are available for reference only.

1 Fisheries by K.F. Lagler. Kasetsart/Hawaii University Contract Terminal Report, August, 1965 in cooperation with the Agency for International Development, USOM to Thailand, pp. 160-209.

2 Basic Texts, Part 11. (Vol. 111). Indo-Pacific Fisheries Council: Agreement and Rules of Procedure. FAO, Rome.

3 Meeting on Business Decisions in Fisheries Industries, Rome 21-25 Sept. 1964. (Vols. 1-3). FAO Fish. Rept. 22(1-3).

4 Research Vessel Design. Papers and discussions presented to the FAO Research Vessel Forum in Tokyo, 18-30 September 1961. FAO Rome, 1961.

5 Fishing Vessel Data. FAO Fisheries Report 28. FIT/R28(Tri). Rome, 1965.

6 Research Vessel Data. FAO Fisheries Report 29. FIT/R29(Tri). Rome, 1964.

7 Manual of Methods for Fish Stock Assessment. Part 1. Fish Population Analysis by J.A. Gulland. FAO Fisheries Technical Paper 40 (Rev. 1), (Dist. Restc.). FIB/T40(Rev. 1). Rome, 1965.

8 Report and Proceedings of the FAO/IPFC Seminar on Fishery Development Planning and Administration, Canberra, Australia, January 28 - February 14, 1964. EPTA/FAO Report No 2086, Rome, 1965.

9 Preparation of Synopses on the Biology of Species of living Aquatic Organisms. FAO Fisheries Synopsis No. 1, Rev. 1. (Dist. Restc.). FIB/S1 Rev. 1, Rome, 1965.

10 Preparation of Synopses on the Biology of Species of living Aquatic Organisms (Addendum). FAO Fisheries Synopsis No 1, Rev. 1. Add. 1. (Dist. Restr.). FIB/S1 Rev. 1, Add. 1, Rome, 1965.

11 The "ABC Weather Coder" by K. Terada. FAO Fish. Circ. 22. FIB/C22, Rome, 1965.

12 Diving la Spirotechnique. Pamphlet, 1'Aventure Sous-Marine, 10 Rue de la Bourse, Paris 2e, France. 28 pp., illus.

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122 Distribution and Marketing of Frozen Fishery Products - Part 5. U.S. Department of the Interior, Fish and Wildlife Service, Bureau of Commercial Fisheries, Fishery Leaflet 431, 78 pp, 1956

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IPFC Regional Studies No. 1. Boiling fish for short term, compiled by G.N. Subba Rao. IPFC, Bangkok, 1965, 18 pp.

" " " No. 2. Use of seaweeds directly as human food compiled by G.N. Subba Rao. IPFC Bangkok, 1965, 32 pp.

" " " No. 3. Containers used for handling and transport of fresh fish compiled by G.N. Subba Rao. IPFC Bangkok, 1965, 48 pp., 5 figs.

JOINT IPFC/IOC MEETING ON FISHERY ASPECTS OF CSK

IPFC/ IOC / 66 / A		Provisional Programme
	B	Provisional Agenda
IPFC/ IOC / 66 /WP 1		Report of the CSK Assistant International Coordinator for Fisheries to the Third Meeting, CSK Coordinating Group Tokyo, 18-20 August, 1966.
	2	Recommendations approved by the Third Meeting of the International Coordinating Group for the Cooperative Study of the Kuroshio and Adjacent Regions (Tokyo 18-20 August, 1966.)

MINUTES

IPFC/C66/M 1 Minutes of the Opening Ceremony and First Plenary Meeti

Minutes of Second Plenary Meeting

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

CONSEIL INDO-PACIFIQUE
DES PECHES

CONSEJO DEL INDO-PACIFICO
PARA PESQUERIAS

I N D O - P A C I F I C F I S H E R I E S C O U N C I L

F.A.O. Regional Office for Asia and the Far East
Bangkok, Thailand

12th Session, Honolulu, Hawaii, U.S.A.
3rd - 17th October, 1966

IPFC/C66/INC. 4

BUS SCHEDULES *

3rd	October 1966	Monday	0900	Bus Departs	Reef Hotel	for	E-W Center
			1200	" "	E-W Center	"	Reef Hotel
			1330	" "	Reef Hotel	"	E-W Center
			1645	" "	E-W Center	"	Reef Hotel
			1750	" "	Reef Hotel	"	Cannon Club and return
4th	October 1966	Tuesday	0830	" "	Reef Hotel	"	E-W Center
			1745	" "	E-W Center	"	Reef Hotel
5th	October 1966	Wednesday	0830	" "	Reef Hotel	"	E-W Center
			1745	" "	E-W Center	"	Reef Hotel
6th	October 1966	Thursday	0830	" "	Reef Hotel	"	E-W Center
			1745	" "	E-W Center	"	Reef Hotel
7th	October 1966	Friday	0830	" "	Reef Hotel	"	E-W Center
			1745	" "	E-W Center	"	Reef Hotel
8th	October 1966	Saturday	0830	" "	Reef Hotel	"	E-W Center
			1215	" "	E-W Center	"	Reef Hotel
			1330	" "	Reef Hotel	"	Sea Life Park and return
9th	October 1966	Sunday			FREE		
10th	October 1966	Monday	0830	" "	Reef Hotel	"	E-W Center
			1745	" "	E-W Center	"	Reef Hotel
11th	October 1966	Tuesday	0630	" "	Reef Hotel	"	Fish Market
			0800	" "	Fish Market	"	Reef Hotel
			0830	" "	Reef Hotel	"	E-W Center
			1745	" "	E-W Center	"	Reef Hotel
12th	October 1966	Wednesday	0830	" "	Reef Hotel	"	E-W Center
			1745	" "	E-W Center	"	Reef Hotel
13th	October 1966	Thursday	0830	" "	Reef Hotel	"	E-W Center
			1745	" "	E-W Center	"	Reef Hotel

14th October 1966	Friday	0830	Bus Departs	Reef Hotel for E-W Center
		1745	" "	E-W Center " Reef Hotel
15th October 1966	Saturday	0845	" "	Reef Hotel " E-W Center
		1215	" "	E-W Center " Reef Hotel
		1330	" "	Reef Hotel " Kewalo Basin-Hawaii Fish, Game & Shrimp Culture Facility and return
16th October 1966	Sunday	0800	" "	Reef Hotel and join vessel for demonstration cruise and return
17th October 1966	Monday	0830	" "	Reef Hotel " E-W Center
		1215	" "	E-W Center " Reef Hotel

*Any alteration in the above schedules will be modified by the Secretary during Plenary or Technical Committee meetings.

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F.A.O. Regional Office for Asia and the Far East
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12th Session, Honolulu, Hawaii, U.S.A.
3rd-17th October 1966

IPFC/C66/INC 5

MONDAY, 3rd OCTOBER 1966
1400-1630

ORDER OF THE DAY

1. Meeting Called to Order
2. Tabling of Country Statements
3. Adoption of Session Programme IPFC/C66/INC 1(Rev.1)
4. Adoption of Session Agenda IPFC/C66/WP 1
5. Council Nominations (a) Administration Correspondents
   (b) Technical Committee Members

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

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IPFC/C66/INC 6

MAILING OF DOCUMENTS

Books and Printed Matter (anything printed ~~by~~ but not bound) may be mailed to Foreign Countries in the following manner:

1. Either as Books or as Printed Matter - sent separately.

2. They are to be wrapped and tied but not sealed (do not use tape). If box is used the rate is considerably higher.

3. "Printed Matter" or "Books" must be clearly printed in several places on the outside.

RATES:

BOOKS

11 pounds maximum
3¢ for first 2 ounces
1½¢ for each additional 2 ounces
e.g. 11 pounds - $1.33

PRINTED MATTER

6 pounds 9 ounces maximum
5¢ for first 2 ounces
3¢ for each additional 2 ounces
e.g. 6 pounds 9 ounces - $1.61

LOCATION OF POST OFFICES:

University Post Office
Book Store
U. of H. Campus
Hours: 0800 to 1530 Weekdays
0800 to 1200 Saturday

Phone: 588-987 for additional
postal information

Waikiki Post Office
Terminal Building - 2345 Kuhio
(located behind International
Market Place)
Hours: 0800 to 1630 Weekdays
0800 to 1200 Saturday

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IPFC/C66/INC 7

TUESDAY, 4TH OCTOBER 1966

ORDER OF THE DAY

1. Meeting Called to Order.
2. Item 10B. Introduction of Exotic Species.
3. Item 2. Secretary's Report on Credentials.
4. Executive Committee Report Section B. Item 5.
5. Executive Committee Report Section C.
6. Report on Status of the Industry.
7. Item 14. Rational Utilization of Fishery Resources of the Indian Ocean.

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

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IPFC/C[illegible]/INF. 8

ORDER OF THE DAY

WEDNESDAY, 5TH OCTOBER 1966

Pacific Room - Jefferson Hall

0900-1200	Symposium on Fisheries Training and Education Convenor Dr. G.L. Kesteven
1330-1730	Continuation of Symposium
1735	Bus departs for Reef Hotel
1915	Bus departs for East-West Center
1930-2230	Continuation of Symposium
2235	Bus departs for Reef Hotel

THURSDAY, 6TH OCTOBER 1966

Pacific Room - Jefferson Hall

0900-1200	Continuation of Symposium
1330-1630	Continuation of Symposium
1630-1730	Visit Bureau of Commercial Fisheries (University of Hawaii)
1735	Bus departs for Reef Hotel

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RETURN TRAVEL

Arrangements have been made with the American Express Company to have their East West Center office assist members of the Conference with their return travel arrangements.

Participants may go directly to the American Express office located on the ground floor of Lincoln Hall (the building just north of Jefferson Hall) or phone for an appointment by calling Miss Jackie, No. 918-667, Extension 667, for outside calls. Within the East West Center, call Extension 667.

The receptionist on duty at the message center will be pleased to make an appointment for you.

Participants are urged to reconfirm bookings or to request bookings as soon as possible, due to the very heavy air traffic demands, particularly on economy class reservations.

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IPFC/C66/INC 10

TECHNICAL COMMITTEE I

PROGRAM

4th October	Tues.	1330-1730	Election of Rapporteur Agenda Item 1 - Adoption of Agenda " " 2 - Rational Utilization of the Fishery Resources of the Indian Ocean " " 3 - Appointment of Working Party on Publications " " 5 - Inter-Sessional Report of the Committees for 1964-66 " " 6 - Working Party Reports: A. Trawling
7th October	Fri.	1000-1200 1330-1730	Agenda Item 7 - Joint IPFC/IOC Meeting; see IPFC/IOC/66/A
8th October	Sat.	1000-1200	Do.
10th October	Mon.	1000-1200 1330-1730	Do.
11th October	Tues.	0900-1200	Do.
		1330-1730	Agenda Item 6 - Working Party Reports: A. Trawling B. Tuna C. Rastrelliger D. Statistics
12th October	Wed.	1000-1200 1330-1730	Agenda Item 9 - Introduction of Exotic Species " " 4 - ExCo Report; Proposals for Future Work of the Council: A. Resources Appraisal B. Strengthening of Far East Regional Office C. Fish Culture D. Fisheries Statistics " " 8 - IIOE

13th October	Thurs.	1030-1200 1330-1730	Agenda Item 10 - Other Subjects Referred to Committee by Council
			" " 11 - Future Terms of Reference of Technical Committee I
			" " 12 - Establishment of Sub-Committe and/or Working Parties
			" " 13 - Program of Work for Next Inte Sessional Period
14th October	Fri.	0900-1200	Agenda Item 14 - Symposium Subject for 13th Session
			" " 15 - Adoption of Session Report
			" " 16 - Election of New Officers

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FRIDAY, 7th OCTOBER 1966

ORDER OF THE DAY

0900-1000	Plenary Meeting - Pacific Room, Jefferson Hall
	1. Report from Technical Committee I on Agenda Item 14, "Rational Utilization of Fishery Resources of the Indian Ocean"
	2. Agenda Item 15 - Items Arising from the 11th Session
	3. Agenda Item 10 - Tropical Fish Culture Research Institute, Malacca
	4. Report from Sub-Committee on Communication with Member Governments
1000-1200	Joint IPFC/IOC Meeting - Pacific Room
	Technical Committee II Convenes in Washington Room
1200-1230	Steering Committee Meeting - Tagore Room, Jefferson Hall
1330-1730	Joint IPFC/IOC Meeting - Pacific Room
	Technical Committee II Convenes in Washington Room
1745	Bus departs for Reef Hotel

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

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F.A.O. Regional Office for Asia and the Far East
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IPFC/C66/M1

MINUTES OF THE OPENING CEREMONY AND FIRST PLENARY MEETING

Monday 3rd October 1966

OPENING CEREMONY

The official opening ceremony for the 12th Session of the Council took place in Kennedy Hall, University of Hawaii, Honolulu.

Mr. Andrew T.F. Ing, Lieutenant Governor of the State of Hawaii, made the opening address, a copy of which will be included in the Proceedings.

Mr. J. C. Marr, representative of the United States Government and Delegate for the United States, delivered an address formally inaugurating the 12th Session. Mr. Marr's address also will be presented at the beginning of the Proceedings.

Following an opening statement by Mr. Lee Bong Nai, Indo-Pacific Fisheries Council Chairman, Mr. F. E. Popper, FAO delivered messages to the Council on behalf of Dr. Sen, Director-General, FAO and Mr. Roy I. Jackson, Assistant Director-General, Department of Fisheries, FAO.

MINUTES OF THE FIRST PLENARY MEETING

The first business meeting of the 12th plenary session of the Council was called to order at 14:00 hours on Monday, 3rd October 1966 in Jefferson Hall, East-West Center, University of Hawaii, Honolulu.

STATEMENTS BY DELEGATES AND OBSERVERS

In accordance with a resolution of the Council at its 6th Session country statements by Delegates and Observers were tabled and not presented verbally except that Mr. A.C. Kaberry, Delegate for New Zealand was offered an opportunity to present a verbal statement in recognition of the recent adherance of New Zealand to the Council Agreement and of its first representation at a Council Session as a full member.

PROGRAM FOR THE 12TH SESSION

On a motion by Australia, seconded by Thailand the Provisional Program for the Session was adopted

AGENDA FOR 12TH SESSION

The Provisional Agenda for the 12th Session was adopted with the following amendments:

i. At the request of the Delegates from the United Kingdom and Malaysia a sub-item under Agenda Item 10, entitled "Tropical Fish Culture Research Station, Malacca", was included.

ii. Also under Item 10 a further sub-item "Introduction of exotic species with particular reference to Hawaii" was inserted at the request of the Delegate for the United States.

iii. The Representative of FAO submitted to the Session a request from the Director-General of the Organization for the inclusion, as Item 14 of the Agenda, the subject "Rational Utilization of Fisheries Resources of the Indian Ocean".

iv. At the request of the Delegate from the United States a new Item Number 15, entitled "Items arising from the 11th Session" was included in the Agenda.

Consequential amendments to the Agenda involved the re-numbering of the provisionally listed Items 14-18 as 16-20.

On a motion by the United States, seconded by the United Kingdom the Agenda as amended was adopted.

MEMBERSHIP OF TECHNICAL COMMITTEES

In accordance with the Rules of Procedure the Chairman polled the Delegations to determine if they desired representation on the Council's Technical Committees.

All present indicated their Governments' desire to be represented on both Committees.

COUNCIL MEMBERSHIP

The Session was informed of the adherance to the Agreement by the Government of New Zealand.

On the basis of a cable received from the Director-General of the Organization,

it was announced that the Government of Indonesia had resumed its membership of the Council.

EXECUTIVE COMMITTEE REPORT

The Secretary introduced the Report of the Executive Committee to the Council. Arising from the above changes in membership the relevant item in the Report of the Executive Committee to the Council was amended by the insertion in paragraph 2 of Indonesia and New Zealand, thus raising the total membership of the Council to 18.

Paragraph 3 of this section was deleted.

With the above amendments the report of the Executive Committee was tabled.

The Delegate from Australia proposed that the Council should direct its attention primarily to section B of the report and moved that the various matters raised in this section should be referred to the Technical Committees for consideration and report, except that Item 5 "Strengthing of Far East Regional Office" should be discussed by the Council in plenary session.

On the problem of improved communications with Member Governments the Council discussed Item 5 in section A of the report.

Various proposals were submitted during the discussion, and the Council appointed a sub-committee consisting of the Delegates from Australia, Malayasia, Thailand, United Kingdom and United States with the Delegate of Thailand as Chairman, to consider the problem and report to the Council in plenary session.

AMENDMENT TO THE AGREEMENT AND RULES OF PROCEDURE

The Secretary advised the Council of receipt of a proposal from the Government of Australia for amendment of the Council's Agreement and Rules of Procedure.

In view of the fact that adequate notice of the proposal for amendment of the Agreement had not been given to Member Governments it was held that consideration of this proposal should be deferred until the 13th Session.

However, on the basis of his Government's proposals, the Delegate from Australia gave notice of intention to amend the Rules of Procedure.

The Secretariat was requested to circularize the Delegations with the relevant information.

It was noted that a minimum notice of 24 hours was required before the Council could consider the proposed amendments.

STEERING COMMITTEE

On a proposal by the Chairman the Council appointed a Steering Committee to consist of Chairman, Vice-Chairman, and Member of the Executive Committee, with Chairmen of the two Technical Committees and the Secretary, ex officio.

The meeting was then adjourned.

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

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IPFC/C66/M 2

MINUTES OF SECOND PLENARY MEETING

Tuesday, 4th October 1966

The Second Plenary Meeting was called to order at 0900 hours.

At the request of the Chairman, the Delegate of the United States introduced Dr. M. Takata, Director, Division of Fish and Game, Hawaii, who presented a paper under Item 10B of the agenda, "Introduction of Exotic Species."

Following the introductory paper, the Council referred the subject to Technical Committee I for discussion and report back to the Council.

REPORT OF CREDENTIALS

In accordance with the Rules of Procedure, the Secretary reported to the Council that the credentials of the Delegates and Observers then present were in order.

STRENGTHENING OF FAR EAST REGIONAL OFFICE

The Council decided to refer this question to the Technical Committees who were requested to prepare specific proposals covering subject fields in which further assistance by Member Governments was desired, and for which improved facilities at the Far East Regional Office would be required.

It was further agreed, however, that discussions on this item by the Technical Committees should be deferred until the Council had considered and passed upon the proposed amendments to the Rules of Procedure of which notice of motion had been given at the First Plenary Meeting.

The representative of FAO assured the Council that the Secretariat would willingly cooperate in these discussions and in the drafting of proposals.

He pointed out, however, that the program and structure of all regional offices was under review by a special committee appointed at the last FAO General Conference, and said that he was unable at this time to give any indication of what proposals or recommendations this Committee might bring forward.

Concerning sources of assistance towards strengthening the Regional Office, it was pointed out that for the period 1967-68, no aid could be expected from United Nations Development Program since the funds for that biennium were already committed.

However, Member Governments might like to consider the possibility of incorporating in their U.N.D.P. Programs for 1969-1970 proposals for group country projects within the fields designated as a result of the discussions at the present Council session.

FINANCIAL REPORT AND BUDGET ESTIMATES

At the request of the Chairman, the Secretary briefly introduced Section C of the Report of the Executive Committee.

The Delegate for the United Kingdom raised the question of the possible inclusion in the regular budget estimates of the estimates drafted in connection with possible Working Party and Subcommittee Meetings during 1967-1968.

The Secretary pointed out that this was a new item on the estimates and it had been considered desirable in this particular case to keep it separate from the budget items normally included.

The Delegate for Australia proposed that Technical Committees be given an opportunity to consider and decide upon the probable requirements for [redacted] meeting of Working Parties during the ensuing intersession period.

Such decisions should be referred to the Council, at which time proposals for the allocation of available funds might be made.

He further noted with pleasure the action being taken by FAO to increase the funds to be made available for Council.

The Delegate for the United States suggested that additional funds might possib be available to cover the costs of Working Party meetings, if the number of Executive Committee meetings could be reduced to one intersession meeting and one pre- and one post-session meeting. This proposal was supported by the Delegate of Australia, and the Representative of FAO said he thought there was a good possibility of arranging transfer of funds between items if the appropri justification could be prepared.

At the request of the Secretary, the Council agreed to refer the question to th Steering Committee for discussion.

STATUS OF INDUSTRY

The document Working Paper #3 on this subject was introduced by the Secretary.

The Delegate for Australia referred to the importance of this document, pointing out that many of the subjects referred to were of special significance to the member countries. Perhaps the most highly significant was the development of a large-scale industrial approach to fishing, through which all the resources of the oceans became vulnerable.

He suggested that the Council needed to give considerable thought to the probable impact of the development of modern technology on resources exploitation and the significance of this in relation to fishery development programs of member countries.

He further indicated areas in the report which could be strengthened on the basis of contributions from Member Governments, such strengthening would enhance the value of this kind of document when presented to future Sessions of the Council.

The Delegate from Malaysia stated that one of the major problems confronting his government was the need to increase the exploitation of existing stocks. To achieve this, a proper program of exploratory fishing under the guidance of skilled master fishermen and gear technicians, who would be able to modify techniques and gear to suit local conditions, was essential. He considered that the biological survey resulting in an assessment of the available stocks should follow the development of a program of increased exploitation. He said it was for this reason that his government strongly supported the proposal for the appointment of a gear technologist to the Far East Regional Office.

The Council decided to refer this Working Paper to the Technical Committees as a significant background document to aid in their discussions.

FISHERY RESOURCES OF THE INDIAN OCEAN

This subject, Item #14 on the Council's agenda, was introduced by the FAO Representative who outlined the proceedings of the first meeting of the FAO Committee on Fisheries leading to the preparation of the Working Paper and the appointment of the Working Party on Rational Utilization of Fishery Resources of the Indian Ocean.

The Delegate for Australia sought clarification on certain ambiguities apparent in the terms of reference of the Working Party.

The Representative of FAO pointed out that during the discussions preceding the appointment of the Working Party, the Committee on Fisheries had itself not been clear as to the distance the Working Party might go in terms of the several matters referred to it, and had left the final decision on this question to the Working Party itself, with the general broad proposal that it should review the whole position and in due course decide which particular aspects of the overall problem might receive priority study.

The Delegate for the United States suggested that the Council should lay out certain guidelines for Technical Committee I during its discussion of the working paper. He specifically referred to the express needs of the region for increased production, research on the fish stocks and for the institution of a facility for discussion and exchange of information, but which might be of a kind different from that so far provided by the IPFC.

He suggested that the guidelines might suggest a fairly narrow view of the proposal, restricting itself to the Indian Ocean region specifically and to the countries immediately concerned; or that a broader view might be taken which could define the relationship of the proposals to the entire region and indicate to what extent the Council might become directly involved in the problem.

The Delegate for Australia suggested that there were three specific fields; namely, the promotion of exploitation of the stocks for increased production; secondly, the control of such exploitation leading to management of the stocks; and thirdly, the problem of the allocation of opportunity to exploit the stocks.

The Representative of FAO proposed that the Council should comment on all aspects and indicated that the Working Party established by the Committee on Fisheries would welcome an exposition of the Council's views.

Following brief announcements by the Secretary, the meeting was adjourned.